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An Assessment of Routinely Collected Information on Internet Sex Offenders by Criminal Justice Social Workers and the Police in Scotland: An Exploratory Study

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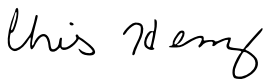
This is to certify that the work contained within has been composed by me and is entirely my own work. No part of this thesis has been submitted for any other degree or professional qualification.



Abstract

The number of offenders who have been convicted of possession, distribution or production of sexually explicit media involving children (SEMIC) has increased exponentially in the last decade. The majority of these cases have been facilitated by increased availability and affordability of the internet and mobile technology. This has led both practitioners and academics to question whether or not internet sex offenders are a new type of offender or whether they are similar to contact offenders who target children offline. Questions have also been raised as to whether or not such internet sex offenders are a homogenous group or whether they can be distinguished by their potential to recidivate or escalate to contact offences. This thesis contributes to this body of knowledge by assessing the information routinely collected on internet sex offenders by criminal justice social workers and the police in Scotland. The forensic reports produced by the police (N=80) alongside matched social enquiry reports from criminal justice social workers (N=30), on all of the offenders convicted for breach of section 52 of the Civic Government Scotland Act (1982) in a particular region of Scotland from 2002-2009, were assessed. Police reports contained detailed information relating to specific offending behaviours: the number of images/videos found on the offender's computer; the age and sex of the children depicted; the severity of the SEMIC (based on the modified COPINE scale); where the SEMIC was from and how it was stored; whether the offender attempted to hide any images or videos, and whether or not he shared or produced any SEMIC. These reports also noted whether the offender had any previous convictions, as well as age at the time of the offence. Based on the social enquiry reports, the criminal justice social workers focused on demographic characteristics (age, educational background, employment history, family status) of the offenders as well as the attitudes or beliefs they might have held (expression of remorse or guilt and admission to being sexually attracted to children). The social enquiry reports also provided risk

assessments, which assessed this group of internet sex offenders as a normally distributed range from low to very high risk to reoffend utilizing the RM2000 and Stable/Acute 2007. The criminal justice social workers did not differentiate between offenders in their management recommendations, which as reported in social enquiry reports, included: no use of the internet except for education or employment; no ownership of devices capable of taking or receiving images/videos, and no unsupervised access to children. Statistical analysis of this sample showed that distinctions between internet sex offenders could be made based on their offending behaviour, demographic information and attitudes they held about the crime. Correlation analysis suggested that offenders who were in possession of SEMIC depicting very young children were also likely to be in possession of SEMIC depicting boys and Level 4/5 images or videos (based on the modified COPINE scale). In addition, offenders who possessed very large collections of SEMIC were also the most likely to be in possession of the most deviant images and videos. Post-hoc analysis suggested offenders who were producers of SEMIC were more likely to have been in relationships and single offenders were more likely to be in possession of the more deviant collections. Contrary to what was expected, the size of an offender's collection of SEMIC was negatively correlated with the risk assessment level reported by the criminal justice social workers. These results are discussed in the context of current research on risk assessment and management. Based on that current literature and the results of this research, it is recommended that criminal justice social workers utilize information relating the offender's behaviour, or more specifically the quantity and deviancy of the SEMIC he possessed, in relation to his social circumstances when making recommendations for management and assessing his risk to reoffend.

Tables

Chapter 1: Introduction

According to the US National Center for Missing and Exploited Children's 2012 annual report (National Center for Missing and Explioted Children, 2012), over 1.7 million incidences of sexually explicit media involving children (SEMIC) found on the internet have been submitted to its Congressionally sanctioned and funded tip line, CyberTipLine, since its creation in 1998. This was an increase of about 1 million reportings between 2009 and 2012 (National Center for Missing and Explioted Children, 2009); making the creation, distribution and collecting of SEMIC a steadily growing and illegal social problem. However, like most modern social problems, SEMIC did not start with the internet. Instead, some argue (Schuijer & Rossen, 1992) the proliferation of sexually explicit media involving children found its footing in the 1960's and 70's with the changing of the censorship laws in the United States and other Western Countries.

Schuijer and Rossen (1992), traced the roots of commercial SEMIC to "hysteria" created by US media outlets, publications lacking empirical evidence and US courts, politicians and government workers following suit. They suggested that what was first considered to involve between 300,000 to over 1 million children used in sex rings and subsequently sexually explicit images, were numbers that were unfounded and made up. While those original numbers were used in books and other publications on the subject (Lloyd, 1976), they were later disproven in a congressional hearing in 1977, which using empirical evidence suggested that the largest underground publication of SEMIC could attract at most 1000 people interested in the subject matter (*Sexual Exploitation of Children*, 1977). However, Schuijer and Rossen (1992) argued that because the media had already implied the numbers were much higher and because Congress had already reacted by passing laws prohibiting SEMIC, the industry was only going to grow.

By most if not all accounts, the industry grew significantly in the period to follow. For some offenders SEMIC was a something they sought (collectors), while for others it was a business opportunity. It is argued that differentially prohibiting the creation of SEMIC across countries (Akdeniz, 2008), the traditional importation of publications through the post from countries with less strict production laws, became an important underground business. According to a report produced for the US Congress in 1986, the business of importing publications of sexually explicit media involving children to the United States was in the region of $5 Million a year (*Child Pornography and Pedophilia, Report made by the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, United States Senate, 99th Congress, 2nd Session, Report 99537, October 9, 1986*, 1986).

It was not long, however, before laws were adapted to prevent the import of such materials into most Western countries. There were also new laws against the production of these publications that were being imported. According to Schuijer and Rossen (1992), this led to the virtual disappearance of all commercial publications involving SEMIC in the late 1980's. However, and coincidently, about the same time, Polaroid instant cameras and VHS (video home system) video recorders became popular and affordable to the general consumer (Buckingham, Willett, & Pini, 2011). Wolak, Finkelhor, and Mitchell (2005b) argue this was the turning point in which the SEMIC collector became the amateur and homemade SEMIC producer. As the publications that had carried these abuse images commercially were no longer available, and an underground market for new content was still there, there was a shift from commercial publications to new homemade amateur productions.

During the early days of homemade videos and photographs (non-commercially produced), physical copies needed to be made if someone was to reproduce or distribute SEMIC. This would have included using film, darkroom equipment and/or even printing machines, as well as setting up a distribution network (D'Orlando, 2011). This meant that while the amateur content might fill some of the void left by the commercially produced material, it was not

easily reproduced, distributed or sold, and while the demand for new content was still there, it stayed confined to its small, hidden groups.

This, however, all changed with the internet and digitally produced media; the next major milestone in the evolution of SEMIC (Arnaldo, 2001). The limiting factors of having to make physical reproductions, as well as having to distribute physical copies, were removed. With the invention of the internet, digital copies could be made in nanoseconds and could be distributed across the globe almost as quickly. The invention of digital cameras and scanning equipment, having the ability to digitise an image, allowed for new content to be easily produced, replicated and distributed with ease (D'Orlando, 2011).

It could be argued that the significant growth in this taboo niche market was due to the ease of distribution and the ease of reproduction. In 2005, the National Center for Missing and Explioted Children (2005), estimated the SEMIC business to worth billions of dollars. The Center also concluded, in 2007, that at least 20% of all pornography included children (National Center for Missing and Explioted Children, 2007), and that they had analysed over 10 million sexually explicit images and videos involving children (National Center for Missing and Explioted Children, 2009).

However, one thing has remained constant throughout this period of technological growth and transition: there still are those with a sexual interest in children, or a willingness to exploit them, who search for, distribute and/or create child pornography. Just as important as understanding whether or not these offenders are taxonomically the same as those offenders caught several decades ago, is the issue of how to assess and manage this more recent type of offender who utilizes the internet or other technology in their sex crimes. There is increasing media, governmental and research attention on the phenomenon of internet-based sex crimes, but little is actually known in relation to how this offender group compares to contact sexual offenders who target children as well as how much risk they pose to continue offending once caught.

One theory is that internet sex offenders are a subset of contact offenders who just have not escalated to contact crimes yet (Webb, Craissati, & Keen, 2007). This is based on some empirical studies that show large portions

of contact offenders who target children were also in possession of SEMIC (Seto & Eke, 2005) and offenders who were in prison for possession of SEMIC had admitted to committing contact offenses against children (Bourke & Hernandez, 2009; Hernandez, 2000). Another theory is that they are two distinct groups of offenders, primarily with different characteristics (McCarthy, 2010), however with some potential overlaps.

It appears as though practitioners in Scotland (mostly criminal justice social workers) have been working under the assumption that internet sex offenders are similar to, if not the same as contact offenders in terms of the management and risk assessment issues they raise. This was evident both in empirical research assessing current practice of practitioners in Scotland (Davidson, 2007) as well as a literature review conducted by the Risk Management Authority of Scotland that noted:

> *in Scotland and in England and Wales, internet sex offenders are currently assessed for risk of reoffending using instruments designed for sex offender assessment, including the Risk Matrix 2000 (RM2000) and the Risk of Sexual Violence Protocol (RSVP). Internationally no risk assessment tools appear to have been developed specifically for this group (Davidson, 2006, 2007).*

This is problematic given that the tools mentioned were not validated on or specifically created for offenders that had not committed contact offences (Seto, 2013), which likely would have led to decisions about the treatment and management of internet sex offenders being made with potentially inappropriate tools. More recent studies (which were not available at the time of developing and conducting this research) imply that internet sex offenders are very different in terms of levels of risk they pose; very few actually reoffend after being caught (Seto, 2013).

The law in Scotland ("Civic Government (Scotland) Act," 1982) and sentencing guidelines in England and Wales (SGC, 2003) suggest that internet sex offenders are not homogenous, but rather can be further divided by whether or not they possessed, distributed or produced sexually explicit media involving children. Others have furthered these classifications of internet sex

offenders based on their offending behaviour (Alexy, Burgess, & Baker, 2005; Durkin, 1997; Elliott & Beech, 2009; Hartman, Burgess, & Lanning, 1984; Krone, 2004; Quayle & Taylor, 2003), or based on the offender's beliefs or social situations (Cohen, Seghorn, & Calmas, 1969; Groth, Burgess, Birnbaum, & Gary, 1978).

At the point when this present research was initiated, very little was known about how the characteristics of the offender's behaviour, or the offender's beliefs, social motivations and history, might affect that offender's risk to reoffend or mitigate how that offender should be managed. Similarly, little was known about what information practitioners were collecting and using to inform those judgements.

This thesis aimed to address some of those questions by assessing:

- what information was routinely collected on internet sex offenders by criminal justice social workers and the police,
- how this data described these offenders
- the relationships between selected elements of the data collected,
- how these relationships might affect or mitigate the risk the offender poses to reoffend as well as the management of that offender

It is hoped that this research will provide a basis for better-informed practice in terms of the assessment and management of internet sex offenders. It is also hoped that this research informs many future studies, including which variables or characteristics should be examined in determining the risk internet sex offenders pose to reoffend.

Chapter 2: Literature Review

This chapter is divided into three main sections. The first section covers definitions and potential ways in which internet sex offending could be understood from both the perspective of criminal justice social workers as well as the police. This informs the second section, which examines the assessment of internet sex offenders, and the third section, which examines the management and treatment of internet sex offenders.

The first section addresses the history and evolution of the internet and how anonymity, affordability and accessibility make the internet an ideal place for the sexual exploitation of children (Cooper, 1998). This section also looks at the evolution, as well as differences in the laws relating to SEMIC in Scotland and the UK, and to a lesser extent Europe, as they are important to understanding how the criminal justice social workers and the police in Scotland manage and assess internet sex offenders. An assessment of the laws also provides grounding in understanding/explaining the offending behaviour of internet sex offenders.

This section also addresses the sentencing criteria used in England and Wales (no such criteria exist in Scotland) as a framework to understanding some of the characteristics and aspects about the crime and criminal that practitioners, mostly the police, but also criminal justice social workers find important to the charging (prosecution), assessment and management (in terms of punishment) of internet sex offenders. As internet sex offending is a fairly new phenomenon, involving potentially a new class of offender, very little is known about the motivations or the intentions of internet sex offenders (Webb et al., 2007). Similarly, it is still unclear as to whether internet sex offenders are a wholly new group of offenders, or simply a subset of contact sex offenders who target children. This section also explores the notion that internet sex offenders are a wholly new group by assessing the potential parallels between contact offenders and internet sex offenders, which also provides a context to

how criminal justice social workers and the police are likely to understand, assess and manage these offenders.

Lastly, this section explores the demographic characteristics that generally are used to describe sex offenders, as well as their belief patterns and social histories, as these also likely have an impact on the assessment and management of internet sex offenders.

The second section is divided into two main subsections. The first addresses the assessment of an offender's collection of sexually explicit media involving children by the specially trained units of the police, or more specifically the processes used and the issues surrounding that assessment. The second subsection addresses the assessment of risk internet sex offenders pose in terms of reoffending, which is usually carried out by criminal justice social workers in Scotland. More specifically this section addresses the processes used, the characteristics that appear to be important, the links to contact sex offenders and the issues with using risk assessment tools created for a potentially different group of offenders.

The third section of this chapter addresses the management of internet sex offenders, which includes treatment and supervision. As internet sex offenders are still considered a fairly new type/sub-type of offender, their treatment programmes are based on the same principles as the treatment programmes for contact sex offenders. These programmes, targets and outcomes are discussed in the context of contact sex offending against children as well as in the context of internet only sex offences. Similarly, many of the supervision decisions relating to internet sex offenders are grounded in research based on contact sex offenders. The removal of children, forced registration, and restricted use of the internet are discussed in the context how the police and criminal justice social workers might understand and use the information gained in the assessment process.

2.1: Definitions, classifications and ways internet sex offenders can be understood

Unlike other paraphilias, internet sex offenders do not have a set of agreed diagnostic criteria outlined by the Diagnostic and Statistical Manual of Mental Disorders (DSM; a manual published by the American Psychiatric Association which provides standard criteria for the diagnoses of mental disorders). Instead, they are categorised in a largely limited way, by what such people are observed to do in relation to the internet. This includes: downloading illegal media from the internet (which mostly, but not exclusively relates to illegal images and videos of children); trading or exchanging such media with others; producing images or videos through photographing or videoing children or modifying existing images; and engaging in the solicitation or seduction of children (Quayle, 2008b). The following categories elaborate on these:

Cyber or Internet offender

According to the United Nations Office on Drugs and Crime (2010) "cybercrime has been used to describe a wide range of offences, including offences against computer data and systems (such as "hacking"), computer-related forgery and fraud (such as "phishing"), content offences (such as disseminating child pornography), and copyright offences (such as the dissemination of pirated content)" (p. 12). Utilizing that report, a cyber or internet offender can be defined as someone who is guilty of committing one or many of those types of computer based offences. As the laws vary from nation to nation on what is deemed to be illegal in this broad category of offences, the term is going to be used loosely and only applied to people who have been convicted of such crimes in a particular nation.

Sex offender who targets children (Child Molester)

Leeb, Paulozzi, Melanson, Simon, and Arias (2008) define child sexual abuse as "any completed or attempted (non-completed) sexual act, sexual

contact with, or exploitation (non-contact sexual interaction) of a child" (p. 54) by someone else. Leeb et al. (2008) go further to define a sexual act as "contact involving penetration, however slight, between the mouth, penis, vulva or anus of the child and another individual" (p. 54) or vice versa and define abusive sexual contact as "intentional touching, either directly or through the clothing of the following: genitalia (penis or vulva), anus, groin, breast, inner thigh, or buttocks...does not involve penetration...and is not required for the normal care or attention to the child's daily needs" (p. 54). For the purpose of this thesis, a contact sexual offender will be defined as an offender who was convicted for an offence relating to one of the acts described above.

Sexual exploitation of a child or a non-contact sexual offence can include the following (Leeb et al., 2008, p. 15):

- *Acts that expose a child to sexual activity (e.g. pornography; voyeurism of the child by an adult; intentional exposure of a child to exhibitionism);*
- *Filming of a child in a sexual manner (e.g. depiction, either photographic or cinematic, of a child in a sexual act);*
- *Sexual harassment of a child (e.g., quid pro quo; creating a hostile environment because of comments or attention of a sexual nature of an adult to a child);*
- *Prostitution of a child (e.g. employing, using, persuading, inducing, enticing, encouraging, allowing, or permitting a child to engage in or assist any other person to engage in, prostitution, or sexual trafficking.*

As such, a non-contact sexual offender will be defined as a person who has been convicted of one of the above, or similar acts.

Internet sexual offender

An internet sexual offender in terms of this thesis is someone convicted of a criminal offence in the UK for sexual crimes committed against children using the internet or other digital device. In Scotland, this will be anyone convicted with an offence against the Civic Government (Scotland) Act (1982) or any of its amendments. This includes offenders who make and distribute sexually explicit media involving children (SEMIC), offenders who distribute

SEMIC, or offenders who download SEMIC from the internet. This type of offender is the main focus of this thesis.

Offenders who use the internet to solicit or coerce children through social networking or other means to facilitate a meeting where they can commit a contact offence, or manipulate a child into taking sexually explicit images or videos of him or herself (sexting) would also be defined as an internet sexual offender, however, they are not the focus of this thesis.

Quayle and Sinclair (2012) argue that one of the largest barriers to discussing the images and videos of children who are being sexually abused, naked or are provocatively posed, as well as the people who produce, distribute and collect such material, are the words used to describe them. The most common and colloquial of these terms is child pornography which is heavily used in the United States within a legal framework (Akdeniz, 2008). Quayle and Sinclair (2012) state that, "outside the United States, and the legal system, there is a growing preference for calling these photographs child abuse images (Jones & Skogrand, 2005), child exploitation materials (Carr, 2009) and indecent images of children (IIOC; Long, et al. 2012). This is thought to more adequately capture the content of these images and the ways they are used, and moves us away from uncritical comparisons with adult pornography (Taylor & Quayle, 2003)" (p. 4).

The phrase sexually explicit media involving children (SEMIC) has been used in this thesis not to "coin" a new phrase but rather as a rational choice. Glasgow (2010) argues that National Organisation for the Treatment of Abusers recommends practitioners use the phrase *sexually explicit media* (SEM), as it is a more neutral term than pornography. Other phrases used, such as, child abuse images and indecent images of children (IIOC), by other researchers/academics (Jones & Skogrand, 2005; Long, Alison, & McManus, 2012) give the appearance they focused only on images. As a large proportion of the sample of offenders in this thesis not only collected images, but collected videos as well, it was thought that the word *media* better described the instances where both were being referred to. Similarly, as the UK criminalized extreme pornography in 2009 ("Criminal Justice and Immigration Act," 2008), it was felt adding *involving*

children to the phrase *sexually explicit media* provided a clearer distinction between the two types of illegal images and videos.

2.1.1: The internet and its role in sex and the sexual exploitation of children

To fully understand how the internet facilitates the sexual exploitation of children through the proliferation of SEMIC, it helps to understand how the internet has evolved, how it is integrated into people's lives, how it's used for sexual activity and how it can be used for sexual exploitation.

According to Leiner et al. (2009) the internet revolutionized global communications like nothing before. It dwarfed the inventions of the telegraph, telephone, radio and computer by combining all those breakthroughs into one form of communication. They explain that the internet started in the 1960's as a way for academics, scientists and researchers to communicate with each other and evolved through the 70's and 80's to become a large global network linking different research projects, universities and governmental agencies. It wasn't until the mid 1980's that the privatization of the 'backbone' of the internet into many commercial networks, that commercialization really took off.
The official definition of 'internet' set out by the FNC is (Leiner et al., 2009, p. 30):

> *RESOLUTION: The Federal Networking Council (FNC) agrees that the following language reflects our definition of the term "Internet". "Internet" refers to the global information system that -- (i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons; (ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons, and/or other IP- compatible protocols; and (iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein*.

This definition describes the internet as a series of computers connected globally and smaller localised networks, which are physically connected to one another through telephone line, satellites and other types of cables allowing

communications between multiple places on the network or globe. The internet itself is not confined by space and time and in a sense can be infinitely large and exist for an infinite amount of time. It should also be noted that there is not one single place that all information comes from or is stored and it is therefore not possible for a single entity (like a government) to control access to or affect the quality of the information out there.

Over the past few decades, the internet has rapidly grown from a small number of computers, only about 300 in the early 1980's, to over 2.5 billion users in 2012 (Stats, 2013). The amount of devices connected to the internet or communicating with one another has surpassed the physically allotted amount and it was predicted that by November 2011 the world will run out of the original IPv4 IP addresses required for the internet to function requiring a redraft of the way the internet works (Arthur & Halliday, 2011). What was also once a luxury for privileged people (those that could afford to pay the high premiums) has now become available for everyone to use.

The EU Kids Online survey (Livingstone & Haddon, 2009) suggests that across the 25 countries surveyed, internet use is "now thoroughly embedded in children's daily lives**:** 93% of 9-16 year old users go online at least weekly (60% go online every day or almost every day)" (p. 5). But it is not only school age children that have been taking advantage of the new information medium; most internet users are adults using the internet at home, at work and even while mobile (Stats, 2013). In June 2010, there were 51,442,100 internet users in the United Kingdom, roughly 82.5% of the UK's population, which was a 234% increase in internet usage since 2000 (Stats, 2010).

The internet has grown beyond wires and is completely mobile, where the entire internet can be accessed from any wireless device that can be connected to a wireless network. The growth of the iPhone and other smart phones allows the average person to have access to the internet 24 hours a day 7 days a week. This includes things like, wireless computers, mobile telephones, cameras, cars and iPods. Some academics suggest that the internet is on its way to moving away from being a tool that people regularly use, to becoming integral to their everyday lives (Arnaldo, 2001; Mars, 2001).

Integration of Technology into People's Lives

Over time, the internet has also been comprised of different mediums of communication and knowledge transfer. In a review of the internet conducted by Calder (2004), he considered these to include:

- the world wide web (what most people are referring to, when they talk about the internet),
- email (an electronic version of postal mail that can be sent from one person to another person or group of people and can contain text as well as images, audio files, videos and any other digital medium),
- newsgroups (which are discussion groups that are hosted on one site and then redistributed to others. These can contain images, audio files and embedded video),
- Bulletin Boards (which are like newsgroups but are more a 'real time' application in which people can discuss information on any topic),
- Internet Chat Relay (which is a chat or conversation exchange medium in which users can talk to one another, send images, videos and audio files through a server to a group of people. It is also possible to form private direct connects between users, which then bypasses the server. Unlike the email, bulletin boards and newsgroups, the Chats can only happen in 'real time' or when the participants are actually presently logged into the server).

However, just as the internet has evolved from only linking a few scientists together, to now linking significantly over 2.5 billion computers (Stats, 2010), the methods of communication over the internet have also changed. While most people in 2014 would know what email and the world wide web (or what they would call the internet) are, they would probably have no idea what bulletin boards, internet chat relay or newsgroups are. Similarly, people in 2005, less than a decade ago, had no idea what Twitter, Facebook, BitTorrent, YouTube, Netflix or iPlayer were and probably lacked the understanding of how they worked.

However, it is these more recent forms of internet communication that have caught on and have become integral into the everyday lives of the developed world. DiNucci (1999) argued that there has been a shift from web 1.0 to web 2.0, where websites and communications have gone from a static download stream of information (web 1.0), to a more interactive and dynamic user experience (web 2.0). While the issue of whether or not web 2.0 is anything more than just jargon (Keen, 2007), the fact remains that more people are using the internet than before.

The most catching facet about web 2.0 and the current phase of the internet is it is all about the user experience. The user no longer only seeks and receives information, but can also in turn author, share and distribute information. This can be done in a myriad of new ways, some of which are discussed below (how this relates to internet sexual offending will be discussed in the sections to follow). While there have been further advances in technology and communication in the past few years, the following are some of the communication forms used by the offenders captured in this sample prior to 2010:

- Social Networking: sites like Facebook, Myspace, and LinkedIn are online communities that let users share photos, videos, dialogs within different circles of friends that they have control over. These circles of friends could be people that they know from their childhood and went to school with, or they could be people that they found in this online community that they share interests with, such as, movies, music and sports.
- Wiki's, comment sections of newspapers and blogs: sites like Wikipedia, The Times and blogspot.com, allow users to create and share information that can then be added to, modified and commented on by all users of the internet. This is different to traditional ways in which a person could have gathered information, such as that relating to current events in traditional newspapers, and would be able to comment or offer their opinion on the matter. The reader of the newspaper would no longer have to write in and have

their views published; he could now just write his comment in the comments section below an article and have it published instantaneously for everyone to see.

- Image and Video sharing communities: sites such as Flickr and YouTube have set themselves up similar to social networking sites in that they are online communities, however their focus is on visual content. Their users are able to share photos and videos that they create with users all over the world. The users are also able to comment on content created and shared by others.
- Peer2Peer Networks and File sharing: programs such as BitTorrent EMule and Kazaa, are computer programs that allows users to share collections of digital media (text, photos, audio files and video files) over the internet. These programs make it easy for a person to share his/her collection and easy to search and collect from other people's collections.

These new forms of communication are not only popular but are also hugely intertwined into everybody's lives. Facebook now has more members than any other website or social network in the world and monopolizes large amounts of people's time. BBC (2010b) reported that in December of 2010, Facebook accounted for at least half the amount of time that people spent online on their mobile, claiming that Facebook used 2.2 billion minutes of people's mobile internet time, whereas the next closest, Google, only used 395 million minutes. BBC (2010b) also reported that Facebook had the highest number of unique users (5 million) and the most pages viewed (2.6 million).

With so many people involved in social networking and online communications, one could ask what is so addictive about the service or what causes some many people to spend so much of their time online. Park, Kee, and Valenzuela (2009) argued that the four main reasons why people feel the need to participate in online groups are socializing, entertainment, self-status seeking and information. In an empirical study they conducted on 1700 Texas college students, they found those four gratifications stood out on a factor analysis. Joinson (2008) also conducted research into the gratifications or uses for

Facebook. His research focused more on the social or information aspect behind the gratifications and concluded that: social connection, social network surfing, status updating, shared identities, content, social investigation were the main reasons for people using Facebook. While these were a bit more specific categories than Park et al. (2009), both studies point to the importance of the social or communication aspects as well as the information gathering aspects. While both of these studies were conducted in 2007, just prior to Facebook opening up to everyone (not just College/University Students), the same reasons would likely still hold true today, with even more users.

Zhang (2010) furthers the argument that a strong sense of community plays a considerable role in a user's online community participation. His empirical research suggests that the stronger the sense of community, the more likely a user is to participate more with a particular group. This sense of community is also affected by the quality of information provided by or to a group. He found that the more accurate or desirable the information the stronger the sense of community. Perhaps Facebook and other social networking sites are so addictive or people spend so much time on them, because they have developed strong senses of community or the groups of people that they are interacting with are providing them with highly accurate and valuable information or content.

Another possible reason that social networking websites such as Facebook are so popular is that the websites lower one's inhibitions allowing people to make stronger friendships. Baker and Oswald (2010) found that people who rated high on a shyness inventory reported a higher satisfaction and better bond with friends established via Facebook as opposed to friends they communicate with face to face. While this study had a small sample size (178) and the majority of the participants were from the same demographic (white, upper middle class), it does provide some clues as to potential reasons why Facebook is popular and widely used.

Another potential, but perhaps less common reason for the increased use of social networks and the internet is anonymity and one's ability to create their own online persona. When creating an online personality, a person has the

ability to be creative and be anyone they want to be (Bullingham & Vasconcelos, 2013). While some users project their "real" selves into the "virtual" world, mirroring online what they would tend to do in the real world, others might choose to be someone that they are not (Boellstorff, 2008) or display only certain aspects of their whole "real" persona in the "virtual" space. Bullingham and Vasconcelos (2013) described several bloggers who kept multiple anonymous personas, each distinct from the other and either only part of the "real" person or a character they were playing. They argued that the bloggers created online personas that were different to their "off-line, real-selves" for several reasons. Some of the bloggers chose to only project certain aspects of their online persona to help tell a story or add weight to the message they were trying to convey, while other anonymous bloggers were projecting a persona specific to the topic they were writing about. Boellstorff (2008) described as a first hand account how easy it was to change the physical appearance of his avatar in Second Life. He changed several of his physical characteristics such as his height, weight, age and race, each time likening it to putting on a new mask. Ducheneaut, Wen, Yee, and Wadley (2009); Nakamura (2013) describe several users of Second Life who created completely different online personas as a way to be more accepted and fit in. These users changed multiple aspects of their physical appearance and in some cases were able to act in Second Life completely different to how they acted in "real life". To a dedicated, creative and imaginative person, there are no limits to who someone could be online, which could be relevant for internet sex offenders.

Concern has been expressed that certain Internet platforms provide opportunities for those who wish to groom children for sex. Social networking sites are popular with adolescents and adults alike, although media portrayals of their dangerousness have been hard to examine empirically (Ybarra & Mitchell, 2008). In recent years, there have been increasing concerns about the kinds of behaviour relating to social networking sites that may be associated with children placing themselves at risk. A study by Mitchell, Finkelhor, Jones, and Wolak (2010) explored the variety of ways social networking sites (SNSs) are used to facilitate the sexual exploitation of youth. Their results suggested

SNSs played a role in an estimated 2,322 cases of internet sex crimes against minors, which ended in arrests, in the year 2006 in the United States. SNSs were used to initiate sexual relationships, to provide a means of communication between victim and offender, to access information about the victim, to disseminate information or pictures about the victim, and to get in touch with victim's friends. However, these authors point out that

> *"by far the largest number of SNS-related arrests (1,696) involved police acting in an undercover capacity. The majority of such cases were initiated in chat rooms (82%); the SNS component being a web site constructed by law enforcement under the guise of a teenager as a place for the suspect to go to see pictures of the "victim" and to further corroborate the undercover agent's identity. This suggests that SNSs can be useful in terms of their ability to enhance law enforcement's capacity to detect and catch criminals. Moreover, a law enforcement presence on SNSs may serve as a deterrent to potential criminals" (p 186).*

The Internet as a sexual medium

The internet has evolved as a modern form of communication, similar to the telephone in terms of having no borders, but more advanced in that it is global, essentially free, and potentially limitless as to the types of communication possible. Users can communicate with others via text, audio or video, in both a read/view anytime format as well as a live 'real time' format. With human nature driving people to constantly form bonds with peers and most adults looking for sexual partners and mates (Janus & Janus, 1993), it should be no surprise that the internet is being used as a modern medium for just that. Cooper, McLoughlin, and Campbell (2000) suggest that the Internet can:

- Facilitate the formation of romantic relationships
- Improve the chances of finding an optimal partner
- Highlight that relationships can develop on attachments, not simply physical appearance
- Improve one's skills in interpersonal communication

Websites or social networks have capitalized on the internet's ability to link people in distant places with others having similar interests and likes. Using social networks for the purpose of finding a mate, sexual partner or friend has been found to be quite common. Studies (Fallows, 2004; Gunter, 2008; Gunter, Russell, Withey, & Nicholas, 2003, 2004; Netimperative, 2005) have found that roughly 1 in 4 internet users have used the internet for meeting people and the internet comes second behind pubs and clubs as the most desired place to meet partners. A recent study looking at all the marriages between 2005 and 2012 in the United States found that more than a third began online, leading the website and internet matchmaker, eharmony.com, to claim that couples in twenty five per cent of all US marriages meet on social networks (Cacioppo, Cacioppo, Gonzaga, Ogburn, & VanderWeele, 2013). The online dating business appears to be quite large with most of these sites charging amounts ranging from $15-over $100 per month, research (Gunter, 2008) suggesting that the average online dater is willing to pay up to £20 per month and yearly profits projected to hit $1.9 Billion by 2012 (Kim, Kwon, & Lee, 2009).

However, it is not just the "average person" that could potentially be looking for a mate or friend online. People who were once disenfranchised or had trouble connecting to other people can, with the internet, form bonds and hold discussions about sexual issues that might have been taboo or difficult for them to have had previously because of either proximal or psychological restraints. People with seemingly unique sexual fetishes can now communicate with one another, express similar ideas, and further the knowledge of their particular sexual needs. For example, people with podophilia (a sexual interest in feet) could discuss with one another the physical characteristics (length of toes, types of arches, types of shoes, etc.) that each of them finds sexually stimulating and perhaps share images or videos that aide in that sexual stimulus. Rosenmann and Safir (2006) argued that the internet actually "pushes" people with paraphilic interests into an online world, where they go from being a sort of outcast to flourishing in a nurturing online environment. Scorolli, Ghirlanda, Enquist, Zattoni, and Jannini (2007) found 381 groups

(individual forums) on Yahoo that included the word fetish and in these groups there were over 4000 messages posted per month and had over 150,000 individual members. These authors also suggest the most common fetish categories talked about included sexual attraction to specific body parts (e.g. feet) followed by things associated with the body (e.g. clothing). While these studies are a bit dated in the current timelines of the progression of internet technology (with the shift from forums to social networking sites; see above), empirical evidence was not found to suggest that these groups of people have not moved to social networking as well.

However, the use of the internet as a sexual medium does not stop at the forming of personal bonds. With the vast amounts of information available, the internet is also host to immense amounts of graphic text, images and video (Shapiro, 2008). Anyone with internet access has the ability to view and download large amounts of pornography that, prior to the internet, would have been physically impossible for one to gain access to. Sex, or sex related use of the internet is one of its most highly used functions. Cooper, Scherer, Boies, and Gordon (1999) found that about 9 millions users (15% of the global online population) had accessed one of the 'top five adult websites' in April of 1998. This was followed by about 31% of the total online population visiting an adult website in August of 1999 (Cooper et al., 1999). In 2006 these numbers jump to 28,258 users viewing pornography every second (Tech Media Network, 2006). Short, Black, Smith, Wetterneck, and Wells (2012) found, in a 46 study meta-analysis comprising of research from 2002 to 2012, that the use of internet pornography has increased significantly over the past ten years. These authors suggested a positive correlational relationship with more accepting attitudes towards sex and increased sexual knowledge, the more frequent internet pornography use has become. The authors also suggest the increased use of internet pornography has led to an increase in interpersonal relationship issues and an increase in personal distress. Short et al. (2012) also found that with time, internet pornography has become more socially acceptable and the sex difference (men used to use internet pornography more frequently than

women) has narrowed. This suggests that the internet can be a mainstream medium for fulfilling one's sexual needs.

Cooper (1998) argues that the rise in users and frequency of the internet as a sexual medium is the result of a "triple-a engine" effect where accessibility, affordability and anonymity come together in a unique way found only in cyberspace. He argues that these three factors have a very potent effect of "turbo-charging" the internet and making it a very attractive place for sexual pursuits. Manning (2006) developed the notion of the "triple-a engine" a bit further and argued that the internet exacerbated the problems associated with pornography usage, which included things like changes in individual behaviour (increased aggression and trivialization of criminal behaviour) and changes in family dynamics (economic well-being and distorted senses of relationships).

D'Orlando (2011) describes the growth of internet pornography as due to consumers rapidly increasing their consumption over time and "appear[ing] surprisingly quick in discovering a growing interest for viewing 'more deviant and bizarre' (i.e. harder) sexual acts they were not interested in before: to put it another way, sexual addiction and escalation become more and more important" (p. 8). So, in a sense, the internet has become the ideal place for pornography to grow and thrive, with few limiting factors and a consumer base that seems to demand more with every image or video they view.

More recently, Döring (2009), in a review of research on the impact of the internet on sexuality, identified six new areas of internet sexuality: pornography on the internet; sex shops on the internet; sex work on the internet; sexual education on the internet; sex contacts on the internet, and sexual subcultures on the internet. She concludes,

> *the most researched area to date has been the consumption of internet pornography, which also has the greatest intensity of use compared to the other areas of internet sexuality. Above all, these studies emphasise risks: harm to children and adolescents; addictive patterns of use; the dissemination and consumption of illegal or deviant pornography; and creation of negative role models through mainstream porn. Existing*

> *studies seldom consider any positive aspects of pornography use, although from the perspective of users, benefits are predominant (p. 1098).*

This is of particular importance to this thesis, as while from a criminal justice perspective, sexually explicit media involving children is viewed in the context of offence-related behaviour, other researchers have reported men who describe using these images as a way of controlling offending behaviour against children (Goode, 2010).

The Internet as a medium of sexual child exploitation

While the internet has nurtured the growth of human sexuality and practice (Döring, 2009), it has also fostered the growth of illegal sexual practices and activities. One of the main concerns is the endangerment of children and the growth of sexually explicit media involving children. Beech, Elliott, Birgden, and Findlater (2008) state that:

> *The Internet Watch Foundation (IWF), the UK's internet watchdog, reported that in 2005 the number of websites reported by the organization to the criminal justice agencies for potential criminal content, including those containing abusive images of children, rose by 78% from 2004 to 2005 (IWF, 2006). In total 6128 sites were reported to the IWF for investigation, with the majority being hosted in the USA (40%) and Russia (28%). Two hundred and eleven Internet newsgroups were listed as being potentially illegal with additional notices served to ISPs [Internet Service Providers] to remove 12,777 images from a further 226 newsgroups* (p. 218).

This was a change from one of the earlier studies looking at pornographic images on the internet, where Mehta (2001) found only 4% of a random sample of pornographic images from a newsgroup depicted prepubescent children. However, the number of sexually explicit images and videos and their availability has changed even more dramatically in the last few years. In 2013, the Internet Watch Foundation (2013) hotline processed 47,809 reports, which is a 27.6% increase from 2009, but a 595% increase from those

reported in 2005. They took action in 13,182 cases, which included child sex abuse content on the web that traced back to 43 different countries (54% coming from North America and 43% coming from Europe including Russia). This is also an 89% increase in the total number of web pages identified from 2009 to 2010 and it claims that 73% of the child victims look to be under the age of 10 years and 65.6% of all the images and videos depict sexual activity between adults and children (Internet Watch Foundation, 2011).

In an empirical study, Hughes, Walkerdine, Coulson, and Gibson (2006) found that roughly 1.6% of all the search traffic in the Gnutella network (a peer 2 peer network) and roughly 2.4% of the response traffic was a direct result of SEMIC. While in terms of percentages that is a fairly small amount of traffic, the sheer size and volume of the Gnutella network suggests that a large number of SEMIC is being searched for and distributed. Hughes et al. (2006) also found that the majority (57%) of people sharing SEMIC on that network, shared no other content and only 17% of the people sharing SEMIC shared at least 50% legal material. Wolak, Finkelhor, and Mitchell (2011) found a significant increase in the number of internet sex offenders in their 2006 sample that obtained images and videos from P2P networks than in their 2000 sample.

Like all other digital information, the internet has made SEMIC readily available to whoever looks for it, no matter where they are physically located. As previously discussed, such content is now available online with increased access, availability and presumed anonymity. The simple "triple-a engine" principles that increased the demand and popularity of internet pornography (Cooper, 1998; Manning, 2006) are also likely responsible for the increase in SEMIC (a deviant subset of pornography). Similarly, just as the internet "pushed" people with paraphilic interests into social networking or the virtual world as Rosenmann and Safir (2006) would argue, people who have a sexual interest in children who might have been "closeted", i.e. not actively seeking out, due to the difficulty in finding such images or videos, are now finding it much easier to come across and are being "pushed" into the virtual world as well.

While not based on empirical research, Calder (2004) suggests the internet is an ideal place for consumers and producers of sexually explicit media involving children (SEMIC) for a number of reasons:

- Technology makes the constant updating very easy—some services claim to update their material biweekly.
- It reaches a global audience faster than any other media and is available in many different formats ranging from pictures, videos, cartoons and stories.
- Pictures and film clips can be downloaded onto a computer and have an advantage over film that their quality does not deteriorate with age or with transfer to another computer.
- It provides digital-quality photographs at far less expense than paper catalogues.
- Those who distribute pornography seek security in the perceived anonymity to be offered by the internet, allowing the user to virtually invent any identity and route a message through different countries to avoid detection.
- The internet has also moved to a point of sophistication so that you can download whole movies and replay them, thus bypassing traditional controls such as the British Board of Film Classification.
- Computers also allow offenders to modify images.

2.1.2: Laws relating to sexually explicit media involving children

The evolution, as well as differences in the laws relating to SEMIC in Scotland and the rest of the UK, and to a lesser extent Europe are important in understanding how criminal justice social workers and the police in Scotland manage and assess internet sex offenders. The law(s) also provides grounding in understanding/explaining how we conceptualise the offending behaviour of internet sex offenders, which will be discussed in the section 2.1.4.

As previously mentioned in Chapter 1, legal issues relating to sexually explicit media involving children in the modern context date back to the 1960's and 70's with the relaxation of censorship laws (anti-pornography) in Sweden

in 1969 and Denmark in 1971, which allowed for commercial SEMIC to be legally published (Schuijer & Rossen, 1992). As a result, other Western countries passed tougher laws covering not only the production of SEMIC, but also the importation of it.

However, the laws that relate to SEMIC are complex and vary from country to country. It is also the case that, as with many other cyber-crimes, SEMIC offences are borderless and what may constitute a crime within one jurisdiction may not be a crime in another. For example, the laws in the Scotland and the UK, as well as most Western countries tend to focus on not only the creation of SEMIC, but also their distribution and downloading. This is because in some areas of the world, laws and law enforcement, in terms of prohibiting the creation of SEMIC, are very different and somewhat lax compared to that of Europe and North America (Akdeniz, 2008). Abusers can create SEMIC in their home country outside of Europe and North America, not be caught or charged and then distribute that pornography, via the internet, to Europe or North America where the likelihood of being caught and severely punished for creating SEMIC is much greater. For this reason, and as a deterrent to slow the demand for such imagery, it is illegal to possess or download SEMIC in Europe and North America.

This thesis has used the term sexually explicit media involving children to describe illegal images and videos that offenders have been in possession of. However, in relation to the law, that term is not present. Akdeniz (2008) argued, "In the fight against child pornography it is imperative from a legal point of view to define what constitutes child pornography" (p. 9). The following sections will attempt to define what constitutes child pornography or SEMIC in Scotland, England and Wales, as well as some supranational legislation in Europe meant to harmonise laws across countries. These nations were chosen because the offenders used in this research were convicted for breaches of these particular laws.

Scotland, England and Wales

While the drafting and implementation of criminal justice legislation is now a devolved matter reserved for the Scottish parliament, prior to devolution this was not the case. Issues that arose in England often affected legislation for Scotland and Wales just as issues that arose in Scotland often affected English legislation. This was because all criminal justice laws in the UK were drafted and implemented centrally from Westminster, the UK parliament, for each nation.

According to Akdeniz (2008), the Protection of Children Act (1978) was in direct response to complaints filed by Mary Whitehouse, who was Chair of the National Viewers and Listeners Association in 1977, which lobbied enough to get the legislation through parliament, even though a government commission (the Williams Committee on Obscenity and Film Censorship) found no evidence that SEMIC was a problem at that time. This legislation, the first in the UK, made it illegal to distribute or produce indecent images of a child under the age of 16 years old.

As Scotland has its own legal system and its own set of criminal justice legislation (Scots Law), the Protection of Children Act (1978), was not applicable in Scotland. Westminster's response to the PCA 1978 was to create the Civic Government (Scotland) Act (1982) and specifically section 52, which "make[s] provision as regards Scotland for the licensing and regulation of certain activities; for the preservation of public order and safety and the prevention of crime; for prohibiting the taking of and dealing with indecent photographs of children…" When the act was first written, the statue made it ("Civic Government (Scotland) Act," 1982):

- *Illegal for any person to take a photograph of, have in possession with a view to distribute or show, or publish any indecent photograph of a child (someone under the age of 16)*
- *Punishable on summary conviction to a period not exceeding 3 months in prison or to a fine not exceeding the prescribed sum (£1000 at the time) or both.*

- *Punishable on conviction or indictment to imprisonment for a period not exceeding 2 years or to a fine or to both.*

This act also defined photographs or films as single images or multiple images including video-recording.

While there are no recorded statistics for charge and conviction rates in Scotland for the first few years that this law was in effect, there are some statistics for England and Wales. According to Akdeniz (2008), from 1980 to 1988 there were 165 convictions relating to the creation or distribution of SEMIC, which is an average of 21 convictions a year. In comparison, there were on average 541 homicide convictions per year during this same period of time in England and Wales (Murder UK, 2011). This low conviction rate could lend either of two explanations; that at the time there really was not a problem with SEMIC, or the problem was not being fully captured by current legislation.

Parliament amended both acts in 1988 with the Criminal Justice Act (1988) suggesting the previous legislation was not robust enough. Previous to this amendment, the acts as written did not make it an offence to possess 'indecent' images of child solely for personal use or not having the intent to show to others. The amendments made it:

- Illegal to possess an indecent photograph of a child under the age of 16.
- Up to the person in defence to prove that he/she had a legitimate reason for having the photograph or that he himself had not seen the photograph and had no reason to think that it would be indecent or that he had been sent the photograph without prior request made for the photograph and that he did not keep it for an unreasonable amount of time.
- A fineable offence upon summary conviction not to exceed level 5 on the standard scale.

Akdeniz (2008) argued that the reason behind why the acts were amended can be found in the court ruling R v Land (1998) which states:

> *...the object is to protect children from exploitation and degradation. Potential damage to the child occurs when he or she is posed or pictured indecently, and whenever such an event occurs the child is exploited. It is the demand for such material which leads to the exploitation of children and the purpose of the Act is to reduce, indeed as far as possible to eliminate, trade in or possession of it.*

However, while the judiciary believe that even a single person who downloads a single file of SEMIC adds to the demand for it (R v Toomer and others 2001; R v Koeller 2001; Beaney 2004; R v Monument 2005), there still is a lack of empirical evidence to prove the notion that those who possess child abuse images, will progress to contact offences against children (Seto, 2013). There is, however, evidence to suggest that some offenders use SEMIC as a grooming tool to aide in their contact offences (Seto & Eke, 2005), which is not the same thing. However, the legislation at the time did not address this type of offence. This is an important facet of this thesis and will be discussed later in greater detail.

The Civic Government (Scotland) Act 1982, with its 1988 amendment along with the PCA (1978) were fairly robust at the time in tackling the underground world of SEMIC, punishing those that were caught for producing, collecting and trading images. In fact, the passage of these amendments created a massive spike in the number of convictions. Akdeniz (2008) showed that there was a significant increase in convictions for possession, distribution and production of SEMIC from 1989 to 1994 in England and Wales when compared to the previous few years. In that 6-year period, there were 1831 attempted prosecutions in which there were 1267 convictions for possession alone. This shows that on average from that time period there were more convictions for possession (211 per year), than there were for production and distribution and for the entire period between 1980 and 1988 (165 total).

The early 1990's brought new issues in regards to the law, with personal computers becoming affordable and compact discs (CD's) and other removable digital (or analogue) media becoming widespread and easily available to the consumer (Waldrop, 2001). As discussed in section 2.1.1, this growth in technology allowed for easy replication of digital media or in this case SEMIC.

Computer imaging software also led to the ability for one to be able to create computer-generated or morphed sexually explicit images involving children (also known as pseudo images) shifting away from images capturing 'real' child abuse (Cooper & Jones, 2007). To adapt to these new technological changes, the laws were again modified in 1994 with the Criminal Justice and Public Order Act ("Criminal Justice and Public Order Act," 1994). These amendments made it illegal to produce, possess or distribute computer generated, or pseudo-photographs of child abuse under the same punishments as if the images were of 'real' children.

According to Akdeniz (2008), the reasons for these amendments were twofold; one was to make it easier for future policing, as they predicted at some point it would become impossible to distinguish between pseudo-images and real images. The second reason was at the time the police believed that there was a direct link between those creating and possessing pseudo-images, and those committing contact offences. The police hoped that by catching those that possessed pseudo-images, they would then prevent those criminals from committing contact offences in the future. As previously mentioned, however, there is no conclusive empirical evidence to suggest that there is or is not a causal link between possession and creation of pseudo-images, and future contact offences. The law, however, has not changed in response to pseudo-images since 1994 and there is further support for them being illegal in a greater European and world context, which is discussed a little bit further below.

While there are no statistics to show whether or not the inclusion of pseudo-images increased the successful prosecutions of either breaches of the Civic Government Scotland Act section 52/52A or the PCA 1978, the statistics do show a continued trend upward in overall convictions (Akdeniz, 2008). The next major spike in prosecutions and convictions came in 2003, when the numbers almost tripled. Akdeniz (2008) reported that in 2002 there were 531 convictions in England and in 2003 there were 1,374. This was a direct result of Operation Ore in the UK and Operation Avalanche in the United States where a single source or website, Landslide Productions, was the origin of SEMIC for a

suspected 750,000 British Citizens (Jewkes & Andrews, 2005; Metcalf, 2007). As discussed previously, this trend of increasing convictions continued with the expansion and increased accessibility of the internet.

The growth of the internet and new forms of digital media also brought new interpretations of the law. Prosecutors and the Crown Office in both Scotland, and England and Wales, started prosecuting offenders with the *more serious* "to make" section of both the PCA 1978 and the Civic Government Scotland Act 1982 as opposed to the *less serious* "to possess" sections for offenders who had downloaded images from the internet onto their computers. This, in turn, brought appeals and case law to clarify this situation. In the case of R v Bowden (2000), the appellate court in England ruled that the original judge's ruling was correct, saying that:

> *A person who either downloaded images on to disc or who printed them is making them. The Act [PCA 1978] is not only concerned with the original creation of images, but also their proliferation. Photographs or pseudo-photographs found on the internet may have originated from outside the United Kingdom; to download or print within the jurisdiction is to create new material which hitherto may not have existed therein (p. 422).*

Coincidently, and at about the same time, an appeals case was being heard by the High Court in Scotland, with Longmuir v. HMAR (2000), and ruled that:

> *…we find no difficulty with the proposition that the word 'make' is apt to cover the activity by which a person using a computer brings into existence the data stored on a computer disk. Such an activity would not be aptly described by the word 'take'. In the note of appeal, the appellant sets out a meaning of the word 'make' taken from The New Shorter Oxford Dictionary as 'produced by ... extraction'. That is an apt description of the way in which data stored on disc is produced, namely by use of a computer extracting electronic signals from the Internet and converting them into that data for storage. That activity, just as the taking of an indecent photograph of a child with a camera does, enables child pornography to proliferate and is thus within the mischief which the amendments in the 1994 Act were clearly intended to extend to and to strike at. For that very*

> *reason such an activity is to be distinguished from simple possession of such indecent material where the possessor has not himself been responsible for bringing the material into existence (p. 4-5).*

These rulings solidified the prosecution's use of the *more serious* sections of the PCA 1978 and section 52 of the Civic Government Scotland Act 1982 to achieve convictions for "making" indecent photographs or pseudo-photographs of children by viewing as well as downloading images from the internet. As Akdeniz (2008) argues, these rulings blur the distinction between those offenders who physically abuse children and capture that abuse in images and those who download or view those images on the internet.

The next time the Scottish, as well as the English and Welsh, Acts were modified was with the Protection of Children and Prevention of Sexual Offences (Scotland) Act (2005), and the Sexual Offences Act (2003), where the age of a child was raised from 16 to 18 years and specific defences were added should the accused be able to prove the child was either 16 or 17 years old. The Scottish Parliament Information Centre (Jamieson, 2005) lists the reason for the change as:

> *The new provisions, by extending protection to young people under the age of 18, are intended to bring Scots law into line with: (a) the Optional Protocol to the UN Convention on the Rights of the Child dealing with the sale of children, child prostitution and child pornography; and (b) the EU Council Framework Decision on combating the sexual exploitation of children and child pornography. The definition of a 'child' in both documents includes persons under the age of 18. Generally speaking, Scots law allows young people aged 16 or over to engage in consensual sexual activity without the threat of criminal sanctions. Thus, the fact that the new provisions apply to those under the age of 18 extends the scope of the criminal law (p. 2).*

The Sexual Offences Act (2003) is the most current legislation for England and Wales in relation to SEMIC. However, in 2009, the Sexual Offences (Scotland) Act (2009), created a new series of offences relating to SEMIC, as

well as redefined child again into "young child" (younger than 13) and "older child" (between 13 and 16 years old). This statute makes it illegal to show SEMIC to either a "young child" or an "older child", adding on extra penalties that were not allowed in the original Civic Government (Scotland) Act of 1982. Because of this Act, Scotland now has recourse to between those offenders who might use SEMIC as a grooming tool for contact child abuse and those who use the images for personal reasons. This is also an important facet of this thesis.

Europe

The European Union and Europe as a whole has taken a different approach to SEMIC. Instead of relying on individual member nations to tackle SEMIC in their own way, the European Commission has drafted binding legislation that all member states must adopt.

However, this was not the original approach of the European Union. According to Akdeniz (2008), the European Union published a Green Paper in 1996 on the Protection of Minors and Human Dignity in Audio-visual and Information Services, where the EU was relying on

> *…a combination of self-control of the service providers, new technical solutions such as rating systems and filtering software, awareness actions for the parents and teachers, information on risks and possibilities to limit these risk and international cooperation (p. 167)*

to control the perceived growing problem of SEMIC. They were also relying on individual member states to police internet service providers, should self-regulation not work. There was concern that hasty over-regulation of a fairly new service (the internet), might stifle new innovation and the growth of what they saw as huge potential in educational, social and commercial opportunities of for member states (Akdeniz, 2008).

However, the Union felt that because the internet was a global resource and Europe was not a "legal vacuum", it needed a harmonious plan to enact across its member states. Its solution was the creation of the Action Plan on promoting safer use of the internet by combating illegal and harmful content on global networks (1999). This plan saw the enactment of "hotlines", similar to

the Internet Watch Foundation in the UK and Cyber Tip Line in the US and Canada, as well as the development of filtering software and rating systems, and the setting up of awareness campaigns. The plan focused on the distinction between illegal content and harmful content where it specified that:

> *illegal content must be dealt with at source by the police and the judicial authorities, whose activities are covered by national legislation and judicial cooperation agreements. However, the industry can be of considerable assistance in restricting the circulation of illegal content (particularly in the case of child pornography, racism and anti-Semitism) by means of effective self-regulation schemes (such as codes of conduct and hotlines) governed and supported by legislation, and with consumer backing*
>
> *harmful content is both that which is authorised but has restricted circulation (e.g. for adults only) and content which could be offensive to some users, even if publication is not restricted because of freedom of speech. Action to combat harmful content first and foremost means developing technology (filtering tools and rating mechanisms) to enable users to reject such content by promoting awareness among parents and fostering self-regulation, which could be an adequate way of protecting minors in particular (p. 1).*

Akdeniz (2008) suggested, however, that too much attention in the plan focused on harmful content and did little in real terms of combating illegal content such as SEMIC.

This changed, however, with an EU Council paper on the Council Framework Decision on combating the sexual exploitation of children and child pornography in 2004 (2004/68/JHA, 2004). This framework was intended to solidify each member state's laws with regards to SEMIC and child exploitation by binding members to comply with the framework by 20 January 2006. This framework defined a child as "anyone under the age of 18" as well as defined SEMIC (child pornography) as (p. 2):

> *Pornographic material that visually depicts or represents:*

- *a real child involved or engaged in sexually explicit conduct, including lascivious exhibition of the genitals or pubic area of a child; or*
- *a real person appearing to be a child involved or engaged in the conduct mentioned in (1); or*
- *realistic images of a non-existent child involved or engaged in the conduct mentioned in (1).*

The Framework (2004/68/JHA, 2004) in article 3 also binds member states into enacting legislation that creates offences for (p. 2-3):

the production of child pornography,
the distribution, dissemination or transportation of child pornography
supplying or making available child pornography
acquisition or possession of child pornography

The Framework (2004/68/JHA, 2004) also mandated criminal penalties, which included imprisonment for at least one to three years or at least five to ten years when the following aggravating circumstances were present (p. 3):

- *the victim is a child below the age of sexual consent under national law*
- *the offender has deliberately or by recklessness endangered the life of the child;*
- *the offences involve serious violence or caused serious harm to the child;*
- *the offence has been committed within the framework of a criminal organisation as defined in Joint Action 98/733/JHA.*

Policing sexual explicit media involving children on the internet can be extremely difficult. The laws are complex and are still not completely harmonized within the EU (Akdeniz, 2008). The intricacies of the law as to how SEMIC is policed and how offenders are caught will be discussed in section 2.2.1.

2.1.3: Sentencing Advisory Panel Guidelines

Following the Criminal Justice Act (2003) when the Sentencing Guidelines Council (SGC) was created in England and Wales, guidelines were set for the Sexual Offences Act (2003) in 2007. While the guidelines were non-binding, it was expected that the Judiciary follow the recommendations of the Sentencing Guidelines Council as well as the Sentencing Advisory Panel (another UK body tasked with making recommendations related to offender sentencing), which were set out in a unified document (SGC, 2003). This document gives sentencing ranges that should be used as starting points, before aggravating and mitigating factors were taken into account. While these guidelines do not apply to Scotland, the Scottish Government and the Scottish Judiciary were debating setting up a similar system (Scottish Government, 2008), but produced no guidelines. The English and Welsh guidelines provide a framework for understanding some of the factors and aspects about the crime and the offender that practitioners, mostly the police, but also criminal justice social workers find important to prosecuting, assessing and managing internet sex offenders. These include (SGC, 2003):

- The deviancy of the images or videos an offender possessed based on the severity of the content
- The deviancy of the images or videos an offender possessed based on the age of the children depicted
- The quantity of image or videos possessed
- Whether or not the offender produced SEMIC
- Whether or not the offender distributed SEMIC
- Whether or not the offender gained financially from the production or distribution of SEMIC
- Whether or not the offender organised his collection of SEMIC

These factors are discussed below in the context of what is currently known about offender behaviour grounded in research and how those factors apply to sentencing.

Level of Deviancy based on Image/Video Rating Scale

The sentencing guidelines are based upon the seriousness of the SEMIC and divided into 5 ascending levels. These levels are based the on work of Taylor, Holland, and Quayle (2001), who determined that images could be divided into 10 ascending categories that could best conceptualize the collections of people who have a sexual interest in children. The sentencing guidelines ignored the first 3 categories and compressed categories 4, 5, and 6 of Taylor and Quayle (2003) into the first level for the sentencing guidelines. The five levels of this modified COPINE (COmbating Paedophilic Information Networks in Europe) scale are as follows (SGC, 2003):

Level 1: Images depicting erotic posing with no sexual activity

Level 2: Non-penetrative sexual activity between children, or solo masturbation by a child

Level 3: Non-penetrative sexual activity between adults and children

Level 4: Penetrative sexual activity involving a child or children, or both children and adults

Level 5: Sadism or penetration by an animal

*** Offenses involving any form of sexual penetration of the vagina or anus, or penetration of the mouth (except where they involve sadism or intercourse with an animal, which fall within level 5), should be classified as activity at level 4.*

Examining Lanning (1992) notion that images could be divided into 3 categories (Indicative: material depicting children in clothes; Indecent: material depicting naked children; and Obscene: material depicting children in explicit sexual acts), Taylor et al. (2001) argued that such a simplistic categorization system did little to explain the complex psychological qualities offenders possessed. They instead argued that images ranging from non-nude images of children from clothing catalogues to images involving bestiality and children were better classified in a continuous 10 level scale, which allowed for collecting to be looked at as a psychological process. While according to their system, not all images would be illegal or considered child pornography, they

argued that having vast amounts of particular images organized in particular ways sheds light onto the psychological processes of people who might have a sexual interest in children. It is thought that image scale is a continuum where, over time, a person who collects images of children will escalate or move up that continuum. While there is little empirical evidence suggesting this assumption, this is another very important facet of this thesis.

The sentencing guidelines suggest harsher punishment for offenders who possessed SEMIC that was more deviant or higher on the modified COPINE scale. One explanation for this could be an assumption that level 4 and 5 images are harder to find. This is partly due to the nature of the SEMIC, as level 1 images and videos could be taken in a non-sexual or even completely normal context and then found by an offender and 'used' inappropriately. However, the more deviant images and videos would have captured the direct sexual abuse of a child escalating from no adult/child contact to direct adult/child contact to even involving sodomy or bestiality. An offender in possession of more deviant SEMIC, would not have been able to come across that material in a normal setting and would have had to have been actively looking in places known to have those types of images or videos, actively trying to get them, or producing them himself. The harsher penalties would be meant to act as a deterrent to the production and distribution of those more serious and deviant images and videos.

There is some theory to suggest offenders who collect more deviant images and videos *might* eventually escalate to contact offenses against children and thus deserve stronger sentences. Sullivan and Beech (2004) argue that offenders might become bored or desensitized to one type of image and need to move up the continuum to still get the same level of sexual satisfaction as the previous level of image was giving them. This suggests that over time a person who used nudist images or videos of children (level 1 on the modified COPINE scale) as a sexual stimulant would eventually grow bored of or desensitized to those images or videos and would need to move on or escalate to SEMIC involving sexual activity and then onto even more explicit images to achieve the same level of sexual arousal or stimulation.

Marshall and Marshall (2000) argue that high levels of masturbation to deviant images and fantasies, used as a coping mechanism, will also escalate toward more deviant content, as the positive feeling from the sexual arousal negates the negative feelings of shame towards the content of the images. This suggests that an offender who is regularly masturbating to SEMIC depicting sexual acts between adults and children (level 3, 4 and 5) will start to feel comfortable with the fantasies around the content of the image and any feeling of guilt or disgust they might have had will become diminished. However, as already mentioned, there is a lack of research to suggest that offenders who become 'bored' with the most 'extreme' images escalate to contact offending.

There is also an argument that the demand for the more 'extreme' or higher level SEMIC fuels its production. Various police stings across the globe (such as Ore and Candyman) have demonstrated that some offenders possess large quantities of SEMIC in fairly extensive collections. Taylor and Quayle (2003) argue that many internet sex offenders are constantly looking for new and unique images. This suggests that the demand for these images would far exceed the supply. Because production of the higher-level images leads to direct sexual abuse of children, the sentencing guidelines (SGC, 2003) suggest those in possession of these images, which is fuelling the production, serve longer sentences.

Deviancy based on the age of the children depicted

Another key factor in the sentencing guidelines (SGC, 2003) relates to the age(s) of the victim(s) depicted in the SEMIC. The guidelines set out 3 key age groups (17-16 years old, 15-13 years old, and younger than 13 years old). The sentences are intended to be the longest for offenders with in possession of SEMIC depicting children below the age of 13 (the most deviant), followed by those offenders in possession of SEMIC depicting children between 15 and 13 followed by those with SEMIC depicting children who are 17 and 16.

These guidelines are in line with contact offense guidelines where the punishments are more severe for offenders who sexually abuse children under the age of 13 compared to those offenders who abuse children under who are

under 16 but older than 13, which are typically less (SGC, 2003). In the UK, it is legal to have consenting sexual relations with children over the age of 16, except in certain circumstances (such as incest or when one of the people is in a position of authority over the other). In those cases where it is illegal to have sexual relations with 16 and 17 year old children, the sentencing guidelines call for sentences of less severity than offenses committed against children under the age of 16 (SGC, 2003).

The sentencing guidelines for contact offenses against children follow some theory and empirical research looking at the trauma caused to child victims. Cooper (2005) argues that adult sexual activity with a child (someone under the age of 13 years old) is extremely traumatic to the child. Other research suggests that adolescent sexual activity with an adult is significantly less traumatic to an adolescent than to a child, but still a bit more traumatic than that of sexual activity between two adults (Rind, 2005).

The quantity of images and videos in an offender's collection of SEMIC

The sentencing guidelines (SGC, 2003) suggest harsher punishments for offenders who are in possession of "large amounts" of SEMIC. The sentencing guidelines also recommend longer custodial sentences for more deviant images and videos, using the modified COPINE scale. It is recommended that offenders who were in possession of large amounts of level 5 images and videos receive harsher penalties than offenders who have large quantities of level 4 images and videos, or small quantities of level 5 SEMIC. The sentencing guidelines, however, do not actually specify what a "large amount" is.

Various studies have shown different ranges in terms of the quantity of images and videos in offenders' collections of SEMIC. Webb et al. (2007) reported that the average number of images found in their sample of 90 internet sex offenders was 16,698 and that the range was between 2 and 921,000. Seto, Reeves, and Jung (2010) found that the majority (50%, N=13) of their clinical sample of internet sex offenders were in possession of between 100 and 1,000 images and videos of SEMIC, while none of the sample were in possession of more than 10,000 images and videos, 23% (N= 6) were in

possession of between 1,000 and 10,000 images and video and 27% (N=7) were in possession of less than 100 images and videos. Their other sample of internet sex offenders, which was derived from police files, was more evenly split with six offenders (16%) having less than 100 images and videos, ten offenders (27%) having between 100 and 1,000 images and videos, nine offenders (24%) possessing between 1,000 and 10,000 images and videos, and twelve offenders (32%) possessing more than 10,000 images and videos.

The premise behind the recommendations that offenders with larger collections be punished more harshly likely has a link to the amount of time an offender has been spending collecting or producing SEMIC. It could be assumed that offenders that have very large collections of images and videos have spent a more time amassing those collections, while an offender with only a few images or videos might have spent less time, searching for and collecting SEMIC. However, no studies were found that assessed the size of the offenders' collections of SEMIC and compared that to the amount of time the offender used to amass that collection. With limited speed internet (dial-up) or even prior to the internet, an offender would have needed a significant amount of time to physically amass large collections of SEMIC. However, with the evolutions in internet speed and availability (as discussed in section 2.1.1), it is quite possible that an offender with a much larger collection spent significantly less time amassing that collection than an offender with a much smaller one. This is an area that needs further exploration, as the size of the offender's collection has been associated with his sexual preoccupation (Glasgow, 2010), a risk factor for recidivism for contact sexual offenders (Babchishin, Hanson, & Hermann, 2011; Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). This will be discussed further later on in the chapter.

Producers of SEMIC

Whether or not an offender produced SEMIC, provides another characteristic by which practitioners might assess, understand and manage internet sex offenders. Producing SEMIC is an aggravating factor in the sentencing guidelines (SGC, 2003) in which the highest sentence category,

starting at 6 years custody, is reserved for those involved in the production or the encouragement of production of level 4 or 5 images or videos.

There have been few studies that assess people who produce sexually explicit media involving children, so very little is known. One study, however, the National Juvenile Online Victimization Study, looked at all the offenders in the United States that were arrested for producing SEMIC between June 2000 and July 2001 (Wolak et al., 2005b). They found that of the 402 offenders who were arrested, almost all of them were male (98%), most were older than 26 years old (89%) and almost half were over 40 years old (44%). However, one of the most interesting findings of their research was that most of the producers were also in possession of images produced by other people (73%). This suggests that the producers of these images have more than a sexual interest in children (the collecting of others' images) and take a step further to the production of their own images. They also found that most of the producers (66%) were the ones to actually abuse the victims in the image. This suggests that most producers are also contact offenders.

The use of drugs or alcohol to facilitate the offense, the use of intimidation or coercion, threats to prevent the victim from reporting the crime, or threats to disclose victims abuse to relatives or friends are all aggravating factors in the production of SEMIC (SGC, 2003). Offenders who produced images or videos and have been found to have used any of the aggravating factors should receive harsher sentences than those who produced images but where there were not any aggravating factors.

Distributors of SEMIC

Identifying offenders who traded or distributed SEMIC is another aggravating factor that can aid practitioner's management, assessment and understanding of internet sex offenders. According to the sentencing guidelines (SGC, 2003), offenders who have been found to have traded or distributed SEMIC, should be given a tougher sentence than those have not been found to have been trading or distributing images or videos of the same level and comprised of a victim of the same age. As discussed in section 2.1.2, both the

law ("Civic Government (Scotland) Act," 1982) and some appeals cases ("R v Land," 1998) are based on the notion that the distribution of SEMIC promotes the further victimization of the child victims by increasing the demand for SEMIC. The offenders who distribute SEMIC are condoning the actions of the abuser or producer of the image by not only viewing the material themselves, but also by sharing those images, allowing others to view them as well.

Financial gain from the production or distribution of SEMIC

Whether or not an offender gains financially from the distribution or production of SEMIC, is another factor present in the sentencing guidelines, and one which provides practitioners with another way to assess, manage and understand internet sex offenders (SGC, 2003). The guidelines suggest harsher penalties for those offenders who gained financially. Wolak et al. (2005b) give examples from their empirical research of a few offenders who had commercial SEMIC businesses. One of the offenders they described offered, on a website, custom request videos featuring 14-17 year old girls for $450 a video. Another offender they described sold sexually explicit pictures of boys through a sophisticated and encrypted website. As discussed in section 2.1.2, the Landslide productions website, where people purchased SEMIC with their credit cards, led to the initial investigation of 750,000 British Citizens (Jewkes & Andrews, 2005; Metcalf, 2007).

The harsher penalties for offenders who gained financially from the distribution of SEMIC could potentially act as a deterrent (Myers & Talarico, 1987). However, Wolak et al. (2005b) found that very few offenders who produced or distributed SEMIC were selling those images or videos, but instead argued that the images and videos in themselves were a commodity.

Collection is systematically stored or organised

The guidelines also indicate that possession of a highly organised collection of SEMIC should be seen as an aggravating factor (SGC, 2003). In this instance the focus is not on the quantity or the content, but rather on how the images and videos are stored. According to the guidelines (SGC, 2003), offenders with collections of SEMIC that were “systematically stored or

organised, indicating a sophisticated approach to trading or a high level of personal interest (p. 114)" should be sentenced more severely than those offenders who have clumped images and videos that do not appear to be in any particular order. This particular factor provides potentially provides insight in to the criminal's behaviour that can help practitioners assess and manage them (Glasgow, 2012; Seto, 2013). For example, offenders who take the time to organise their collections would either be doing so out of personal interest (wanting to know where images of a specific type were located) or out of trading or sharing interest (where it is advantageous to be able to offer someone else photos of a particular type) (Glasgow, 2010). In both of these situations the offender would be seen as a bigger risk to society than someone who either doesn't trade SEMIC, or who doesn't show an extreme fascination with sexually explicit images and videos involving children.

Making the distinction between offenders who categorise their collections and those that do not has a fairly lengthy empirical background. Hartman et al. (1984) made the distinction between closeted, isolated, cottage and commercial collectors. Durkin (1997) made a similar distinction with a "trader" typology and Krone (2004) made further distinctions with the some of his categories of "browser, trawler, secure collector and distributor."

2.1.4: Offending behaviour

As internet sex offending is a fairly new phenomenon, and one involving potentially a new class of offender, very little is known about the motivations or the intentions of internet sex offenders (Webb et al., 2007). Similarly, it is still unclear as to whether internet sex offenders are a wholly new group of offenders, or simply a subset of contact sex offenders who target children. Part of this thesis will explore the notion that internet sex offenders are a wholly new group. However, conceptualising the potential parallels between contact offenders and internet sex offenders, provides a context to how criminal justice social workers and the police are likely to understand, assess and manage these offenders.

As described in section 2.1.1, the internet has become integrated into people's daily lives and is being used for noncriminal social relationships, as well as providing a medium for deviant sexual interests to thrive. The internet itself can foster a nurturing environment for the personality constantly seeking approval for being different and will 'stroke' the egos of those personalities who only needed that extra assurance that others were out there (Rosenmann & Safir, 2006). The internet also blurs the lines between "normal" sexual behaviour and what others deem "deviant" (Chirban, 2006). However, there are a few categories that seem to persist and stand out amongst western societies as sexual behaviour that is perverse or unacceptable. These include sexual activity with: under-aged people of either sex (paedophilia), animals (bestiality), dead people (necrophilia) or inanimate objects (fetishism) (Wakeling, 1979).

While there is little definitive empirical evidence about why certain people's sexual preferences deviate from the majority, there are many theories within the discipline of psychology. In a clinical setting, it is often thought that, so called deviant sexual behaviour by adults is linked with the inability to achieve mutually satisfying relationships with peer adults and that there is retention of a childlike interaction with others (Wakeling, 1979). Sexually "deviant" people are also thought to have strong feelings of hate and guilt, and are very introverted when it comes to their sexual encounters. These are factors that have been found in several large meta-analyses, to increase the risk that a contact sexual offender will reoffend once released (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009)(see section 2.2.2) and are targeted within treatment programmes (Salter, 1988) (see section 2.3.3). These factors or characteristics are likely to be some of the core drivers in contact sex offenders' behaviours and are likely to be similar amongst internet sex offenders (Seto, 2013).

Contact sex offenders who target children

There are a number of different ways in which clinicians and other professionals have attempted to categorise contact sex offenders who target

children in relation to their victim(s). One way tends to be a three-tiered approach. This looks at (1) the age difference between the offender and the victim(s), (2) specific sexual behaviours like: kissing, fondling, exhibitionism, voyeurism, cunnilingus or fellatio, whether or not there was penetration and of what, the vagina, anus or mouth and with what, whether or not it was the penis, different body part, or a foreign object, as well as (3) whether or not the intent of the adult was to achieve sexual gratification or not (Hollin & Howells, 1994).

While the specific sexual acts and relationship between the offender and the victim might be one way to classify contact offenders who target children, offenders have also been classified based on their behaviour patterns. One common distinction that is based on first hand accounts of child molesters and some follow on theory suggests that their offending is a coping mechanism due to stress (Groth, 1990; Groth et al., 1978). Even if that is the case, some empirical research suggests that they offend often and with regularity. A study conducted by New York State Psychiatric Institute found that 232 convicted contact sex offenders who target children had admitted to attempting 55,250 acts of molestation and had actually completed 38,727 of them (Abel, Becker, & Cunningham-Rathner, 1984). Another study conducted by (Freeman-Longo & Wall, 1986) suggests that 53 convicted paedophiles committed about 25,757 sex crimes.

Groth in 1982 came up with another categorisation system in which he divided offenders into either regressed or fixated categories (Salter, 1988). Regressed offenders were described as primarily sexually attracted to same aged mates. It was suggested that these offenders' sexual involvement with children was more impulsive and almost directly related with stress or some other external factor (Groth, 1983). For these offenders, an event or situation occurs, for example the offender gets drunk or was under stress at work, then comes home to his children, or comes across a child, and he sexually abuses his victim as a way of coping or dealing with the external factor. This is more situational. Cognitive behavioural therapists would argue that this is a cognitive distortion in the offender's behaviour pattern that he uses to justify his action in that particular situation (Salter, 1988) (see section 2.3.3).

Conversely, the rest of the contact sexual offender that targets children population can be classified into a group that actively seeks out children. Groth (1983) described these as fixated offenders, all of whom have some key characteristics, the most important one being their persistent sexual attraction to children no matter what the stress level of that person. He also suggests that these offenders' attraction to children would have started during adolescence, they probably are single and would have had little sexual contact with people of the same age (Groth, 1983). These offenders also would normally tend to prefer the company of children as opposed to adults, and more than likely do not have a history of drug or alcohol addiction (Groth, 1983). So in this instance, there is not an external factor that can help to explain why the offender acted the way he did; rather the offender creates the situation for the offence to happen. Cognitive behavioural therapists would argue, in this case, that there are more than just cognitive distortions that allow the offender to victimise the child, with the cognitive distortions having evolved into calculated and premeditated plans (Salter, 1988) (see section 2.3.3).

This particular dichotomy could potentially be important when understanding internet sex offenders. Those offenders that possess large collections of sexually explicit media involving children or have been involved in the distribution of production of SEMIC, in more than one instance, are similar to fixated child molesters, as their use of the internet to seek out their sexual fetishes or needs, would suggest that they are sexually attracted to children. Seto, Cantor, and Blanchard (2006) found in a sample of 685 offenders that offenses for the possession of SEMIC were a better diagnostic indicator for paedophilia than sexually offending against child victims. Conversely, those offenders who have very small collections of SEMIC, or have only searched, produced or distributed images or videos on a single or very few occasions might be classified as more situational, if there was an external factor mediating their behaviour. These distinctions have potential management and treatment implications (see section 2.3).

Sexual preoccupation and sex addiction

Salter (1988) argues that paedophilic behaviour is similar to that of an alcoholic, in that they act and converse in ways to protect their current way of living and access to their addiction. Sexual addiction is another possible way to understand the offence related behaviours of internet sex offenders. Goodman (1992) defines sexual addiction as a condition in which some form of sexual behaviour is employed in a pattern that is characterized by two key features: recurrent failure to control the sexual behaviour, and continuation of the sexual behaviour despite significant harmful consequences. Consequently, sexual addiction is a syndrome, in which some form of sexual behaviour relates to, and affects, an individual's life in such a manner to meet the diagnostic criteria for addictive disorder.

While 'sex addiction' was not classified in the DSM-IV TR as a specific category, it does fall under the category of 'sexual disorders not otherwise classified' and can also fall under the guise of 'addictive disorder' (American Psychiatric Association, 2000). The debate, however, does not focus around whether it is a disorder, but whether or not it is the direct result of another underlying condition such as obsessive-compulsive disorder (Carnes, Nonemaker, & Skilling, 1991). This debate continues as sexual addiction was rejected as a classified disorder in the latest version of the DSM (5) which was published in May 2013 (Rettner, 2012).

There are a number of groups that support people when their sexual behaviour becomes problematic which include: Sex Addicts Anonymous, Sex and Love Addicts Anonymous, the National Council on Sexual Addiction and Compulsivity, and Cybersex Chat Addicts Anonymous (Plant & Plant, 2003). The notion of having a support group lends some support to the belief that sexual addiction is genuine (Birchard, 2011).

Carnes (2003) describes how one of his patients had a sexual addiction behaviour pattern:

> *As a young boy he began to escape a life of abuse and emotional deprivation through masturbation and sexual fantasy. As his guilt and shame built up, his need for escape increased. He began sexually molesting*

> *friends and siblings. A dangerous cycle was established in his life. His feeling of pain, loneliness and shame were numbered by a sexual 'fix' or, when that was not available, by alcohol abuse. Although temporarily successful in blocking his inner feelings of emptiness, his behaviour fed this same sense of shame and worthlessness. All aspects of his life became affected as he reached adulthood. At work, he could not control his fantasizing about female co-workers and clients, periodically changing jobs to stay out of trouble. His wife and children became objects used to satisfy his sexual obsession. He could not even read a magazine without turning it into pornographic material to use for his sexual fantasies. Jim's life was unmanageable. He was powerless to control his behaviour, for his problem had become one of sexual addiction.*

According to Carnes (2003) the addictive cycle begins with a faulty belief system that develops during dysfunctional early family life. This belief system then fosters the impaired notions and thinking that isolates that particular individual from reality. Delusions and cognitive distortions of reality supported by denial, reinforces the cycle. The individual would then be drawn into a "continuing cycle of compulsiveness, ritualization, preoccupation and despair that is self-perpetuating and eventually takes over that person's life" (Carnes, 2003). Carnes (2003) also argues that the unmanageability of repetitive addiction cycle reinforces the idea that "he is a bad person that is not capable of being loved". This then strengthens the distortions that lead to more compulsions and the cycle starts over again continuously getting stronger. The sexual experience then becomes the primary motivator for the addict (Carnes, 2003).

In applying Carnes (2003) sexual addiction theory to internet sex offenders, one explanation to their possible behaviour could be that they are stuck in a sexual addiction cycle. Perhaps due to a bad childhood, marriage, or other personal relationship, they are left with strong negative cognitive distortions suggesting that they are "incapable of love". Due to their need or drive for sex, they then turn to the internet for sexual satisfaction. As this

interaction addresses the "absence of love" they believe they have, their cognitive distortions (that they are incapable of love) are supported. The more the offenders achieve sexual stimulation from the internet, the larger that "absence of love" begins to feel, requiring even more frequent sexual stimulation from the internet to compensate. Eventually the offender becomes sexually preoccupied and compulsive, spending the majority of their time using the internet for sexual stimulation. This cycle then escalates, theoretically, until it is out of control and the offender's needs can no longer be fulfilled; as a result, they search out more deviant content and potentially live physical encounters with children.

The empirical data tends to support this argument. Corley and Kort (2006) argue from their clinical experience and from current empirical studies (Chaney & Dew, 2003; Ross, Månsson, Daneback, & Tikkanen, 2005), that as many as 16% of the men who are seeking sexual experiences through the internet score moderate to high on sexually compulsive inventories. Also, in a study conducted by Dew (2005), of the 508 heterosexual married men who frequently visited chat rooms for married men, 40% had at least one sexual encounter outside of their marriage within the last month and 78% had at least one such sexual encounter within the last year. He also found that the most sexually active people identified themselves as gay or bisexual, of which 20% had a sexual encounter within the last 24 hours with someone they met in a chat room and 25% within the last week. Perhaps one of the more interesting findings of Dew's study was that nearly a quarter of all the reported gay and bisexual men who were married and were having frequent sexual encounters with people they met over the internet were also having regular sexual intercourse with their wives (1-3 times per week).

In a literature review assessing the potential reasons why internet sex offenders use sexually explicit media involving children, Beech et al. (2008) argues that of the four categorical reasons given, two involve a perpetuating cycle of sexual attraction to children where the images and videos fuel or aide that addiction while a third implies impulsivity or curiosity. Seto et al. (2010) found, in an empirical study assessing the reasons given by offenders for their

use of SEMIC, that the majority of their sample cited sexual attraction to children. These offenders were also found to have very large collections (10,000 + images and videos), possessed the most deviant content (mostly boys and depicting sexual violence) and some were involved in large distribution and trading networks. This suggests the most deviant offenders had a strong sexual preoccupation and were potentially addicted to the most deviant content.

Numerous meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) have shown that there is also a strong link between deviant sexual interests, sexual preoccupation and the level of risk an offender poses to reoffend. The parallels between sexual preoccupation and sexual addiction will be discussed further in section 2.2.2.

Behaviours specific to internet sex offenders

As already discussed, practitioners' ability to conceptualize, understand and classify internet sex offenders to a large extent relies on what they have done. Taylor and Quayle (2003) argue that sexual offenses against children that are committed with the aide of the internet are not a singular type of activity, but rather a complex set of inter-related behaviours. They suggest that offenders who only download sexually explicit images and videos involving children, but do not communicate, trade or produce images and videos themselves may "be qualitatively different from the person who adventitiously uses children within their social world to produce images to trade on the internet" (Taylor & Quayle, 2003). This sub-section is going to focus on the specifics details in relation to what internet sex offenders do using the law's ("Civic Government (Scotland) Act," 1982) three categories, collectors, distributors and producers as a structure (see section 2.1.2). The sentencing guidelines from England and Wales (SGC, 2003) also provide further behaviours or characteristics also related to the behaviours of internet sex offenders such as: the size and deviancy of their collections of images and videos, whether or not the offender produced or distributed any images or videos, whether or not the offender's collection was organised and whether or not the offender gained

financially from the production or distribution of SEMIC (as discussed in section 2.1.3).

Collectors

Collectors of sexually explicit media involving children can be defined as people who save sexually explicit images and videos. The law (see section 2.1.2) makes no distinction between offenders who possess only one image or video and those that possess multiple. Similarly, the law also makes no distinction between the offenders who are in possession of SEMIC and the reasons they might be in possession of it. Consequently, however, some experts argue that not all collectors of sexually explicit media involving children are the same.

Sullivan and Beech (2004) argue that collectors of SEMIC can be classified into three distinct types based on the offender's behaviour patterns. They suggest that *Type One* offenders collect SEMIC as a wider deviant sexual behaviour that could include contact offending. They suggested that *Type Two* offenders collect images and videos as a feeding source to their developing sexual interest in children that can crossover or lead to contact offending. They defined *Type Three* offenders as people who access SEMIC out of curiosity, which they suggest is unlikely to lead to contact offences. The interesting thing about Sullivan and Beech (2004) is the way their typologies are integrated into the wider offending pattern of the offender. They suggest that there is a massive distinction between those offenders who use SEMIC as part of their over arching criminal behaviour involving children and those that will never go on to contact offences.

A more recent typology of internet sex offenders by Elliott and Beech (2009) makes similar distinctions about collectors of SEMIC based on their offending behaviours suggesting 4 distinct groups. The first group *periodically prurient offenders*, are those who were acting out of general curiosity or impulsivity that might be linked to a wider interest in extreme pornography. The second group is that of *fantasy-only offenders* that trade and collect images but have do not have a history of contact offences. The third group are *direct victimisation offenders* or offenders who use the internet as a tool to facilitate

their contact offences including grooming and/or production of child sex abuse images. The fourth group is that of *commercial exploitation offenders*, who gain no sexual gratification out of SEMIC, but rather collect, trade and produce images and videos to make money.

Both Sullivan and Beech (2004), and Elliott and Beech (2009), distinguish between offenders who collect SEMIC due to their sexual interest in children and those that might collect it out of curiosity or for non sexual reasons. In their interviews with collectors, Quayle and Taylor (2002) got responses from offenders describing the collective, non sexual value of some of the images:

> *Some of them I didn't much care for at all ... but as I say they were part of a series or they were there for other people or they were just to see what was out there ... I mean it gets to a stage also where you're just collecting to see how many different ones you can get and this sort of thing and you're not ... necessarily aroused or turned on by all the pictures that are coming in ... (O.K.).*
>
> *And there was also the thrill in collecting them. You wanted to get complete sets so it ... was a bit like stamp collecting as well (E.I.).*

For offenders with large collections of images and videos, this particular nonsexual collecting behaviour could be described as obsessive-compulsive. However, there has been little research into whether these non-sexual collectors meet the diagnosis criteria for obsessive-compulsive disorder and truly have no sexual interest in collecting these images and videos or whether this is just an excuse used to internally (to themselves) or externally (to others) justify their collecting of deviant materials.

Apart from obsessive-compulsive reasons, the other non-sexual reason given for the collection of SEMIC by offenders is for monetary gain. Sexually explicit images and videos involving children have generated billions of dollars (National Center for Missing and Explioted Children, 2005). Offenders might collect images and videos purely to sell them. However, the amount of offenders who are actually involved in the commercial side of SEMIC is very small. Mitchell, Jones, Finkelhor, and Wolak (2011) found that only about 10% of

distribution cases from a sample of offenders in the United States involved a cash transaction between people. However, Estes (2001) argues that SEMIC has been commoditised and has a value in itself. Quayle and Taylor (2002) quoted an offender as saying, "we were trading pictures…it's, as much as it pains me to say…kind of like trading baseball cards (Q.H.)," suggesting that some images maybe more valuable than others.

A third distinction between those who collect SEMIC is one that is made by Krone (2004) in the typology system he developed. He argues there is a difference between offenders who collected images and videos that were freely available on the internet and those who collected SEMIC from secure sites that might have included encryption, password protection, or even required that a new user provide new content as a way to access other images and videos. Overall, four of the nine typologies Krone (2004) identified relate to those offenders who collect SEMIC:

- *Browser*, a person who unintentionally comes across child pornography but then decides to keep it
- *Trawler*, a person who actively seeks child pornography using openly available browsers
- *Non-Secure Collector*, a person who actively seeks and shares material through unsecured networks like in chat rooms and might have a minimal amount of security involved in the collection like passwords
- *Secure Collector*, a person who actively seeks and shares material in a secure environment, usually involving encryption, but also having a set-up that locks the fellow group members into protecting one another by requiring submissions of images to join the group

To develop his typologies, Krone (2004) took a more quantified approach to offenders online behaviour that allowed him to place internet sex offenders on a continuum of increasing seriousness of offending. He used three axes to determine the seriousness of the offence. The first looked at the *nature of the abuse* and assessed whether it was indirect or direct victimisation. The second looked at the *level and type of networking* used by the person. The third looked

at the *level of security* employed by a person to avoid detection. He suggested that as the seriousness increased on these three axes the overall offending behaviour would increase as well. The other five typologies that Krone (2004) identified: *Private Fantasy, Groomer, Physical Abuser, Producer, Distributor,* relate to offenders who create and/or distribute SEMIC. These will be discussed below.

While Krone (2004) makes the distinction in his typology relating the level of security imposed by the website, forums, or groups in which the offenders obtained their SEMIC, a similar distinction can be made about the type of security employed by the collector or the way in which an offender chose to store his collection of images and videos. Taylor and Quayle (2003) argue that offenders who categorically store their collections are more serious offenders than those who might just have one folder with many different images or videos comprised of varying degrees of deviancy. This seriousness likely correlates to the offender's intent. Offenders with systematically organised collections likely knew what they were collecting, taking the time to categorise their images and videos. Similarly, offenders that might have employed encryption, password protection or attempted to hide their collection of SEMIC, likely were aware of what they possessed and chose to secure/hide it. This contrasts with offenders that might have possessed large collections of unorganised images and videos, some of which might have been classified as SEMIC. These offenders might have unknowingly downloaded and saved sexually explicit images and videos involving children in the process of downloading and saving other potentially legal pornographic material (Quayle & Taylor, 2002, 2003). As discussed in section 2.1.3, this is a distinction that has sentencing implications (at least in England and Wales) and potentially has management implications (see section 2.3).

Producers

Producers also have collections of SEMIC. The main difference, however, relates to whether or not the images or videos possessed by the offender were created by that offender. As discussed in section 2.1.3, Wolak et al. (2005b)

found that the majority (73%) of the SEMIC producers in their sample of 403 offenders were in possession of images and videos created by other people, suggesting that producers of SEMIC are involved in larger networks of both collectors and distributors. Sheehan and Sullivan (2010) also found that producers possessed a range of images and videos created by other people. They also provide a further distinction between offenders who produce SEMIC and share those images and videos and those who produce SEMIC and don't share those images and videos. While they found that all of the offenders in their sample shared images or videos, they provided case study examples where offenders produced images, but chose not to share the images they produced (Sheehan & Sullivan, 2010, p. 159):

> *I never actually sent [my images], and also once again this comes back to the fact that I don't want to get caught for something here and I figured the more contact I have with him, you know, if I started sending him things, the more of a trace is left, you know, so it was kind of self-preservation.*

Sheehan and Sullivan (2010) suggest that there are distinct behaviour and personality differences between sharing producers and non-sharing producers in that the sharing producers seem to "have higher level of access to the victims, the nature of their abuse is more serious and their grooming and manipulation more sophisticated, and appears to be focused upon manipulating the victims to collaborate with the abuse". This is likely to have assessment and management implications, which will be discussed in sections 2.2 and 2.3.

Relationship to the victims is another distinction that can be made about the behaviours relating to producers of SEMIC. Sher (2007) found that the majority of SEMIC producers are either related to, or work closely with (educational or sport settings), their child victims. This suggests that very few producers of SEMIC seek out stranger children to document in sexually explicit acts. The management implications of this are discussed in section 2.3.

Commonly assessed characteristics relating to internet sex offenders' behaviour

Table 2.1.1 shows the some of the factors or characteristics that have been investigated in research and in practice relating to the internet sex

offending behaviour. The sentencing implications to these characteristics have already been discussed in section 2.1.3; the assessment implications are discussed in section 2.2 and the implications to managing these offenders based on these characteristics are discussed in section 2.3.

Table 2.1.1: Studies describing characteristics of internet sex offending behaviour

Factors or Characteristics of Internet Sex Offending	Studies
Severity or Deviancy of images/videos based on COPINE Scales	(Carr, 2004; McCarthy, 2010; Quayle & Jones, 2011; Seto et al., 2010; Webb et al., 2007)
Age of the children depicted	(Carr, 2004; Quayle & Jones, 2011; Steel, 2009)
Sex of the children depicted	(Carr, 2004; Quayle & Jones, 2011; Seto et al., 2010; Webb et al., 2007)
Race/Ethnicity of children depicted	(Carr, 2004; Quayle & Jones, 2011)
Number of images and videos	(Carr, 2004; McCarthy, 2010; Seto et al., 2010; Webb et al., 2007)
Surroundings in images or videos	(Carr, 2004)
Whether or not the images or videos were organised	(Carr, 2004)
Variety of themes within images and videos	(Carr, 2004)
Incest or implied incest within image/videos	(Carr, 2004)
Where the images or videos came from	(Carr, 2004; Webb et al., 2007)
Where the images or videos were stored	(Carr, 2004; McCarthy, 2010; Webb et al., 2007)
Hide, encrypt or password protect images or videos	(Carr, 2004; McCarthy, 2010; Seto et al., 2010)
Value of the computer equipment used	(Carr, 2004)
Where the images/videos were accessed	(Webb et al., 2007)
Paid for SEMIC	(McCarthy, 2010)
Distributed SEMIC	(McCarthy, 2010; Seto et al., 2010)
Produced SEMIC	(McCarthy, 2010; Seto et al., 2010)
Part of an online SEMIC community	(Seto et al., 2010)
Time spent viewing SEMIC	(McCarthy, 2010)

2.1.5: Offender's beliefs, social circumstances & demographic characteristics

Sexually explicit media involving children (mostly images and stories), as well as, people having a sexual interest in children started before the Internet (Schuijer & Rossen, 1992). As a result, the context in which practitioners understand internet sex offenders is grounded in both practice and theory relating them to contact offenders. This section explores the demographic characteristics that generally are used to describe sex offenders, as well as their belief patterns and social histories. As discussed in the previous section, this thesis is exploring the notion that internet sex offenders are different to contact sex offenders, so distinctions that might be important in relation to those characteristics are also discussed. The potential implications these characteristics have to their assessment and treatment of internet sex offenders are addressed in sections 2.2 and 2.3.

Age of the offender

The age of an offender when they commit a crime is a characteristic that is commonly reported and affects: sentencing (GOV.UK, 2013), treatment and management (see section 2.3), risk assessment (Grubin, 2011) (see section 2.2.2) and even understanding why the offender might have committed the crime. Abel et al. (1987) reported the mean age of contact sex offenders who target children in a sample of 561 offenders was 31.1 years old (SD=11.1), an age that has remained fairly constant over a number of samples across a number of years (Fisher, 2000). Internet sex offenders have been reported to have been slightly older in a few samples: 37.16 (SD=10.73) (Alexy et al., 2005), 39 (SD=13) (McCarthy, 2010), 37.6 (SD=12 police sample) 33.8 (SD=11.2 clinical sample) (Seto et al., 2010). Faust, Bickart, Renaud, and Camp (2014) reported that their subset of internet only offenders were significantly older (43; SD=11.4) than their subset of contact offenders who targeted children but who had no history of internet offences (39.1; SD=12.1). There have also been some differences in the ages of offenders when internet sex offenders aren't considered one common group of offenders. For example, Mitchell et al. (2010)

have found that internet sex offenders who used social networking sites to facilitate sex crimes against children were significantly younger than those internet sex offenders who were not active in social networks. This seems to fit with the current trend suggesting a rise in the number of youths involved in the self production and distribution of SEMIC in which they are both the victims, and the producers of the images and videos (Lööf, 2012). It also fits with the trend of internet sex offenders getting younger, as reported by (Mitchell, Finkelhor, Jones, & Wolak, 2012; Wolak et al., 2011).

Offending History

As described in section 2.1.4, some internet sex offenders collect, trade and produce SEMIC as part of their larger offending behaviour, which includes contact offences. The distinctions between offenders who have a history of contact only offences, SEMIC only offences and combined offences have been found to be important in relation to those that recidivate. Hanson and Bussière (1998) have shown in a meta-analysis, as discussed in section 2.2.2, that the offending history of an offender, both sexual and general, is an accurate predictor of recidivism. Similarly, in a recent meta analysis comparing recidivism rates of offenders based on whether or not they were SEMIC only, contact only or a combination of the two, Seto, Hanson, and Babchishin (2011) found that internet sex offenders who had a previous history of contact offending were more likely to recidivate either sexually or generally than internet sex offenders who did not have a previous history of contact offending.

Offender's childhood development

While some literature suggests that sexual offending, be it general or focused, such as paedophilia or internet sex crimes, starts later in life for various reasons, a significant portion of theory suggests that personality development during childhood and early adolescence is key in understanding why sexual offenders commit sex crimes (Fisher, 2000). Having had an unstable or abusive childhood is often listed as one of the key factors in why offenders commit crimes (Bartol, 2002). Abel et al. (1984) found that 40% of the offenders in their sample that abused boys and 24% of the offenders that had

abused girls were victims of sexual abuse as children themselves, suggesting a potential link between being abused as a child and perpetuating abuse against children as an adult. Multifactor theories have been developed incorporating an offender's childhood abuse as an explanation for their offending (Marshall & Barbaree, 1990, p. 272):

> *A capacity to sexually aggress must be overcome by appropriate training to instil social inhibitions toward such behaviour. Variations in hormonal functioning may make this task more or less difficult. Poor parenting, particularly the use of inconsistent and harsh discipline in the absence of love typically fails to instil these constraints and may even serve to facilitate the fusion of sex and aggression rather than separate these two tendencies.*

McCarthy (2010), however, found that less than 11% of their non-contact internet sex offenders reported being sexually abused as a child suggesting that link might not carry over to internet sex offenders. This is a trend also found by Faust et al. (2014) as they reported that their contact only offenders were more likely to have reported being sexually abused as child than internet only offenders.

Offender's education

There is also an assumption that psychometric scores of intelligence (IQ, SAT scores, etc.) are correlated with one's likelihood of becoming a criminal (Bartol, 2002). This is also based on the assumption that one's intelligence is tangibly measured by the highest level of education obtained. Or more specifically with the assumption that those with the highest psychometric score having the highest levels of education and thusly the lowest likelihood of being a criminal (Crocker & Hodgins, 1997).

Some typologies of child molesters (Cohen et al., 1969; Groth, 1983; Groth et al., 1978) suggest that fixated offenders or paedophiles are likely to be less educated and have a more childlike demure - one of the reasons why they associate better with children than with adults. Bates and Metcalf (2007) as well as Faust et al. (2014) found their samples of non-contact internet sex offenders

were generally more intelligent than their samples of contact sex offenders who targeted children. This has led some (Webb et al., 2007; Wolak et al., 2005b) to claim that internet sex offenders appear to be of a higher intelligence than general sex offenders and the general offending population.

The implications for assessment and management relating to internet sex offenders' likelihood of not having been abused as a child and their higher than the average offender intelligence will be discussed in sections 2.2 and 2.3.

Offender's marital/relationship status

The ability to form intimate adult relationships is a distinction made between fixated and regressed offenders in multiple typologies of contact sexual offending against children (Cohen et al., 1969; Groth et al., 1978). Cohen et al. (1969) suggested that *fixated paedophiles* have sexual interests that are expressed as desires to smell, suck, caress and fondle the child and that this group has never been able to maintain a mature relationship with peers their own age through adolescence, young adulthood or adulthood. They argued that *regressed paedophiles* had a normal adolescence with good peer relationships and have had some heterosexual experiences. However, throughout that period, they suggested that *regressed* offenders had consistently felt inadequate in terms of masculinity for sexual and nonsexual activities and have a serious coping problem when dealing with ordinary stressors in life. It is suggested that at some point, regressed offenders are pushed over the edge by having their masculine image shattered, sometimes by discovering a cheating wife, and then trying to 'regain' their manhood by taking out their sexual frustrations on a child (Groth et al., 1978).

While these typologies form the basis for understanding, assessing and managing contact sex offenders who target children, these have been found to not apply to internet sex offenders. While some studies (Burke, Sowerbutts, Blundell, & Sherry, 2002) found that internet sex offenders were in relationships at the time that they committed their offences, Wolak et al. (2005b) found that 41% of their sample of offenders were single and never married and Webb et al. (2007) found that 49% of their sample of internet sex

offenders were single. This suggests that the relationship status of an internet sex offender might not play as big a part in whether or not he collects, distributes or produces SEMIC.

Humans are sexual beings that need and have sexual gratification for various reasons ranging from stress relief to emotional connection to revenge (Meston & Buss, 2007). While the official relationship status of an internet sex offender might not be related to whether or not he is going to commit a SEMIC offence, not having regular sexual intercourse potentially could be seen as an explanatory factor or even a risk factor for internet sex offenders. A lack of sexual intercourse fits well into the four pathways into child sexual abuse, or more specifically the intimacy deficit pathway (Middleton, Beech, & Mandeville-Norden, 2005). These offenders could be substituting an adult intimate relationship for a pseudo one they create with the images they download and from which they achieve sexual gratification, if they were not receiving it from a current sexual partner. This theory, however, is untested and would need to be explored through empirical work, something that this thesis only scratches at.

The implications for an offender's relationship status on his assessment and management are discussed in section 2.2 and 2.3.

Access to children

The dichotomies of *fixated* versus *regressed* offenders in the typologies of contact offenders who target children make an important distinction when it comes to access to children. Groth et al. (1978) suggest that fixated offenders seek out their victims, who are usually not related to them. However, regressed offenders are usually related to, or acquaintances of their victims. It has been argued (Hanson & Morton-Bourgon, 2005) that fixated offenders are more dangerous and have a higher chance or reoffending as it is about an underlying attraction to children rather than a situational factor that causes the offender to victimise a child who just happens to be in the vicinity, as with the case of the regressed offender. Having access to children in these cases has clear assessment and management implications that are discussed in sections 2.2 and 2.3.

Both Seto et al. (2010) and Carr (2004) assessed whether or not internet sex offenders in their samples had access to children. Neither found a discernable pattern. Long et al. (2012), however, found that internet sex offenders who also had a history of contact offences were significantly more likely to have had access to children than offenders who had a history of internet only offences. They took this to suggest that the access to children could have acted as a situational inhibitor, which could fit with the regressed sex offender sub-type (Groth et al., 1978).

Socio-economic status

There has long been an assumed link between low income and propensity to commit crime. Bartol (2002) suggests that factors such as employment status, income level and where a person is living can help to determine whether or not a person is likely to commit a crime or not. It is assumed that people of lower socio-economic status and lower wealth are more likely to be criminals than those who are better off financially. Distinctions between offender's socio-economic statuses have also been found to relate to differences between sex offenders. Barbaree and Marshall (1989) found that sex offenders who targeted children were likely to be of a lower socio-economic status than sex offenders whose victims included adults. While it has been assumed that social class and employment stability are predictive factors of recidivism for sex offenders, Hanson and Bussière (1998) found in a meta-analysis of studies that neither of those two factors are accurate predictors.

Mitchell et al. (2010) and (Carr, 2004) both assessed the socio-economic status (SES) of the internet sex offenders in their samples. They both found that internet sex offenders appear to be on average of a higher SES and fill a larger range of SES than contact offenders and general offenders. However, neither found any differences between the groups of internet sex offenders they were assessing, suggesting that SES on a whole might not be a factor that affects internet sex offenders.

There are, however, a few situations, that have not been researched in which socio-economic status, or the amount of disposable income an offender

has might relate to, or limit, specific offending behaviours. For example, in the early days of the internet, gaining access to this technology was quite expensive and its speeds were relatively slow in comparison to today. Paying for faster speeds and even more time (as originally access was paid for by the minute/hour) was expensive. This could have limited the amount of time an internet sex offender spent online collecting and trading SEMIC, and potentially would have had a direct impact on the total number of images or videos he had in his collection. It could be argued that offenders in the early days of the modern internet (late 90's early 2000's), who possessed large collections of SEMIC must have spent considerable amounts of time and money. However, as internet speeds increased and the costs for access decreased, the amount of time required and the cost incurred to collect and amass large collections of SEMIC would have also declined. Offenders with large collections in the early 2000's might have been of a higher socio-economic status than current offenders with equal sized collections of SEMIC.

Socio-economic status and employment stability are still considered to be factors that affect the risk a contact sexual offender might pose to reoffend as well as potentially affect his management. These implications are discussed in sections 2.2.2 and 2.3.

Offender's attitude about the crime

Bartol (2002) argues,

> *psychopaths most often function in society as charming, daring, witty, intelligent individuals, high on charisma but low on emotional reaction and affect. They appear to lack moral standards or the ability to manifest genuine sensitivity toward others. If criminals, they become the despair of law enforcement officials because their crimes appear to be without discernible or rational motives. Even worse, they show no remorse or ability to be rehabilitated.*

There have been many studies assessing psychopathic tendencies or beliefs, the lack of remorse or victim empathy and the failure to admit guilt, in relation to contact sex offenders. Hare, Clark, Grann, and Thornton (2000) found that

psychopathic sex offenders tend to be more brutal, unemotional, violent and sadistic than other sex offenders. These offenders also tend to be harder to treat or manage and reoffend at much higher rates (Quinsey, Rice, & Harris, 1995). Similar psychopathic attitudes have been measured in internet sex offender samples. However, no significant differences have been found when comparing contact offenders and SEMIC only offenders (Carr, 2004, 2009; Seto et al., 2010).

Commonly assessed characteristics relating to internet sex offenders' demographics

Table 2.1.2 shows some of the factors or characteristics that have been investigated in research and in practice relating to the demographic characteristics describing internet sex offenders, the social histories and some of the attitudes they might hold.

Table 2.1.2: Studies describing characteristics of the offender

Characteristics of the offender or his history	Studies
Age	(Alexy et al., 2005; Carr, 2004; Faust et al., 2014; Long et al., 2012; McCarthy, 2010; Middleton et al., 2005; Mitchell et al., 2010; Seto et al., 2010; Webb et al., 2007)
Race	(Carr, 2004; Faust et al., 2014; McCarthy, 2010; Mitchell et al., 2010; Seto et al., 2010; Webb et al., 2007)
Criminal history	(Carr, 2004; Faust et al., 2014; Long et al., 2012; McCarthy, 2010; Middleton et al., 2005; Mitchell et al., 2010; Seto & Eke, 2005; Seto et al., 2010; Webb et al., 2007)
Occupation	(Alexy et al., 2005; Carr, 2004; Faust et al., 2014; Long et al., 2012; Mitchell et al., 2010; Seto et al., 2010)
Educational background	(Carr, 2004; McCarthy, 2010; Mitchell et al., 2010; Webb et al., 2007)
Socio-economic status	(Carr, 2004; Faust et al., 2014; Long et al., 2012; Mitchell et al., 2010)
Living situation	(Carr, 2004; Long et al., 2012; Webb et al., 2007)
Marital status	(Carr, 2004; Faust et al., 2014; Long et al., 2012; McCarthy, 2010; Mitchell et al., 2010; Webb et al., 2007)
Access to children	(Carr, 2004; Long et al., 2012; Seto et al., 2010)
Frequent contact with children	(Carr, 2004; Long et al., 2012; Seto et al., 2010)
Works with computers	(Carr, 2004)
Admitted guilt	(Carr, 2004; Seto et al., 2010)
Expressed remorse	(Carr, 2004)
Acted with aggression	(Carr, 2004)
Abused as a child	(McCarthy, 2010; Webb et al., 2007)
Substance abuse at time of offense	(McCarthy, 2010; Webb et al., 2007)
Mental health problems	(McCarthy, 2010)
Declared sexual attraction to children	(Seto et al., 2010)

2.2: Assessment

This section is divided into two main subsections. The first addresses the assessment of an offender's collection of sexually explicit media involving children by the specially trained units of the police, or more specifically the processes used and the issues surrounding that assessment. The second section

addresses the assessment of risk internet sex offenders pose to reoffend, which is usually carried out by criminal justice social workers in Scotland. More specifically this section addresses the processes used, the factors that appear to be important, the links to contact sex offenders and the issues with using risk assessment tools created for a potentially different group of offenders.

2.2.1: Assessment of an offender's collection of SEMIC

As mentioned in previous sections of this chapter, it is important for the court case against an internet sex offender, as well for the sentencing (at least in England and Wales), for the offender's collection of sexually explicit images and videos involving children to be thoroughly assessed. Cooper and Jones (2007) report that a specialty forensic unit at a police department or national crime centre usually assesses an offender's collection in SEMIC for the following areas: number of images/videos in the collection; severity of the sexual abuse depicted in the image or video; whether or not the children depicted in the images or videos are real or whether it is a pseudo image; sex and age of the children depicted; identity of the children depicted; identity of the adults/sexual abusers in the images/videos; when the images or video was created; and where the images or videos came from.

Quantity of images and videos

Assuming that no encryption or password protection was used, determining the quantity of image and video files on a storage medium (such as a hard drive, USB thumb drive, or cd rom) is an automated simple process (Hart, 2004). Built in functions of standard operating systems (Windows, OS X, Linux) have the ability to search for, and categorise, digital files based on their type (in this instance image or video files) (Apple, 2010; Microsoft). Commercial digital forensic evidence analysis software tools also have the ability to conduct the same searches of storage medium (including deleted files) and can produce reports listing the number of files based on the file type; a process likely used by the special forensic units within the police (Glasgow, 2010; Hart, 2004). Given the total number of image and videos an offender possessed could also consist

of legal images and videos, is not likely that the total number would be reported in itself. Following an analysis of the content of the images and videos, the quantities are likely to be reported based on the characteristics that describe their content (Glasgow, 2010). While there is a lack of research offering the most common criteria and categories used, media reports from court hearing in Scotland (BBC, 2010a, 2013), as well as the sentencing guidelines in England and Wales (SGC, 2003) suggest that this is likely to be the severity of the sexual abuse depicted in the images or videos as well as the age of the child victims depicted.

The encryption or password protection of files, drives and storage medium makes it difficult, if not impossible, for the police forensic units to determine the types of files stored and the quantity of them (Casey & Stellatos, 2008). Some advanced full disk encryption systems allow for different encryption keys to unlock different portions of the hard disk and without the keys, or knowledge of how many there are, forensic examiners could be unaware and unable to access of all the contents of a particular drive, making the collection of evidence impossible (Casey, Fellows, Geiger, & Stellatos, 2011). The 5th Amendment of the United States Constitution protects people from self incrimination and there have been cases where the judiciary ruled that the state (the police) cannot force someone to hand over encryption keys, essentially resulting in the cases being dropped ("Grand Jury Subpoena to Sebastien Boucher," 2007). Consequently, the UK has legislation that punishes people with up to 5 years in prison for failing to provide investigators with encryption keys and passwords, but only in terrorism cases. Casey et al. (2011) however, noted several cases where the prosecution for those offences were difficult as the defendants claimed they provided the keys, but the disks must have been corrupted somewhere in the process of the investigation, still rendering it impossible for examiners to collect evidence.

Severity level of an image or video

Taylor et al. (2001) and Quayle (2008a) describe how the COPINE (COmbating Paedophile Networks in Europe) project used a large sample of

previously identified sexually explicit material involving children to create the original 10 level rating scale based on the severity of the content within the image. As discussed in section 2.1.3, the sentencing guidelines in England and Wales dropped the first 3 categories and compressed categories 4 to 6 leaving a modified 5 level scale (Gillespie, 2003; SGC, 2003). Taylor et al. (2001) argue that sexually explicit images involving children clearly fit within one of the ten levels (or modified 5 levels) they identified, which allowed the project to manually catalogue each image in their database based on the image's content.

Holland (2005) argued that in May of 2004, the COPINE database alone held over 700,000 sexually explicit images involving children and that without having the resources to determine how many unique victims those images contained it would be hard to venture a guess at how many there were. Holland (2005) also identified the lack of global communication between police forces as another potential problem in identifying the child in SEMIC and gave the example of Interpol reporting only 297 victims globally being identified. This suggests the police would have had to manually assess each image in an offender's collection based on the content of the image, similar to how the COPINE project originally developed the rating categories. However, with the evolution of image scanning technology and the better communication between municipalities, the databases of previously identified images has grown significantly allowing for the images to be processed by a computer and scanned for a match to previously identified images.

Taylor and Quayle (2003) found there are thousands of new images being produced and every time a new collection is assessed a large portion of the images will be new or unique. Given that some of the more recent studies have cited samples of offenders possessing on average more than 15,000 images (Webb et al., 2007), one significant limitation in the police forensic units ability to assess these images and videos for their corresponding COPINE rating level (as well as for other factors, which will be mentioned below), is the amount of time it would take to manually assess each image and video. While the amount of time is likely to vary by image and by the person conducting the analysis, a conservative approximation of a minute to load and assess the image

and at least a minute to properly document that assessment, still would suggest significant amounts of staff time. The average collection of 15,000 images would take roughly 30,000 minutes to assess, which is 500 hours or roughly 62 continuous 8-hour workdays.

As manually assessing each image in an offender's collection is likely to be an impossible task, practically speaking, the police forensic units are likely using a sampling process. This would involve taking a sample of images from the offender's collection and conducting an in-depth analysis of only that sample and generalizing those characteristics to the whole of the collection. The limitations to sampling, however, included: potentially missing new images or videos and subsequently not identifying new child victims and having a skewed representation of the images and videos.

While Taylor et al. (2001) argued that the typical sexually explicit image involving children clearly fit within one of the 10 COPINE levels (or modified 5 levels), their original analysis only assessed images. The same modified scales are also being applied to videos, at least in the context of the sentencing guidelines in England and Wales (SGC, 2003). While in principle the classifications should be the same, in practice there are a few potential problems with the content analysis of videos. Cooper and Jones (2007) gave examples of where sexually explicit videos involving children were hidden on videotapes or within movie files that contained children's cartoons as well as in the middle of action movies. These videos appeared on the outside and at the beginning/end to be a normal legal movie, but had other illegal content sliced or edited in. As a result, Cooper and Jones (2007) argue that the whole of all the videos in possession of a suspect must be watched and analysed. This has time implications for the same reasons as listed above.

Another potential issue with applying the modified COPINE scale to sexually explicit video involving children is that the still images from different portions of the video could be classified at different stages on the scale. For example, one portion of the video could be classified as level 1 (nude erotic posing), while later stages of the video might be classified as level 4 (sexual penetration involving an adult and a child). The police forensic unit could have

different options in the way they rate a video on the modified COPINE scales. They could give a range detailing the progression of the video (level 2-4), they could list different time sections of the video and how that corresponded to the rating scale, or they could just list the highest rating. These same issues are also present in the analysis of a video for the age and sex of the children depicted, which is discussed below.

The age of the child victims

Determining the age of the child victim(s) in SEMIC is not only difficult in most situations, but it is also crucial to understanding the nature of the crime and how to manage the offender (section 2.3). As discussed in section 2.1.3, the age of the children depicted also has a bearing on the sentences imposed in England and Wales (SGC, 2003). While not published in guidelines, one could expect the age of the children depicted to have a similar bearing on sentencing in Scotland.

The most reliable way to determine the age of the child in SEMIC is to identify the child victim (Cooper & Jones, 2007). By utilizing the victim's date of birth, the age of the child in the image or video can be determined by subtracting the date the image or video was produced by the child's birth date. While the vast majority of SEMIC is produced by a relative or friend of the child victims (Cooper & Jones, 2007), the likelihood of identifying the victims still remains slim. As discussed above, Holland (2005) points out that very few of the child victims depicted within the sexually explicit images have been identified and that while there were several large databases of known sexually explicit images, there has been little communication between municipalities and the holders of these databases.

A significant portion of SEMIC involves children where their faces are not visible, which makes identifying the children nearly impossible (Cooper, 2011; Cooper & Jones, 2007; Holland, 2005; Wolak et al., 2005b). In those cases, there is one main method used to assess the age of the children depicted. This involves the manual assessment of the image or video by a person who is trained, most likely a forensic medical examiner, in which they assess the child

victim's age based on certain characteristics like pubic hair, genital development and height (Cooper & Jones, 2007). The major advantage to this method is the error rate is fairly low as long as the person is trained on what characteristics to look for (Cooper & Jones, 2007). Similarly, to what was discussed above, the major disadvantage to this method is the amount of time it would take to analyse an individual image, which is compounded by the number of images or videos in an offender's collection.

To overcome some of the time constraints, an automated computer process is now used. In 2010, this was a fairly new technique used to speed up, or keep up with the amount of image processing that was required. Simply put, computer algorithms are used to scan the images/videos for matches to already rated/identified images held within a super-national database, saving the image/video from being assessed again.

In the cases where the images or videos were not a match and need to be manually assessed, Cooper (2011) suggests that sexual maturation ratings (SMR) systems based on the work carried out by Marshall and Tanner (1969); (Marshall & Tanner, 1970) and more recently Wu, Mendola, and Buck (2002) give a basis looking at genital development and pubic hair which is useful in determining the age of the children depicted. Another possible method is to look at the height of the child and compare that to growth charts or use body to head ratios (Cooper & Jones, 2007). When these physical characteristics of the children are visible in an image or video, they can aid the forensic medical examiners in their assessment of the children's age.

SMR's and Tanner Scales.

The Tanner Scales (Marshall & Tanner, 1969, 1970) were developed in the United Kingdom in a series of studies that looked at the patterns of pubertal changes in both boys and girls. Through a sample of about 500 youths, Marshall and Tanner devised a rating scale that classified the pubertal development of boys and girls into 5 categories (W. A. Marshall & Tanner, 1969, 1970) (See Appendix A: Tanner Scales).

Although Tanner has denounced the use of his research to determine the age of a child in an abuse image, Cooper and Jones (2007) argued that "pubic hair distribution is the most obvious and reliable gauge of sexual maturation in child pornography". A major advantage to this system is the fact that it was devised using empirical data. Current biological understanding suggests that maturity or growing up and the physical body changes through puberty are controlled by genetics and fairly constant throughout the human genome (Wu et al., 2002). While there have been a few changes over time with median starting points for particular stages, current studies have shown that these have moved only months and that the differences between ethnicity can also be measured and have remained fairly constant (Wu et al., 2002). This suggests there is low chance for error.

There are however also disadvantages to the Tanner Scales or other SMR scales. While they are good for determining the age of child based on the physical changes of puberty, that is also a limiting factor. The difference between a 13 year old male or female and that of a 12 year old or younger has to do with the increased amounts of pubic hair. This distinction increases further for the 16 year old and under category. However, pubic hair is something that can be easily removed on the actual person through various methods, as well as, within the image through photo editing programs on a computer. An offender could manipulate the look of the victim to make them look younger by manipulating pubic hair, which thus causes problems with age identification. Cooper and Jones (2007) mentions that examiners need to be cautious when looking at pubic hair alone and that when looking at images, female's breast development stages should also be assessed, as it would be physiologically wrong for breast development to be at a different SMR stage than pubic hair. However, it is much more difficult in males if pubic hair is removed, as genital development is much harder to measure without being able to inspect the testicular size by touch (Cooper & Jones, 2007).

The SMR scales are also not as useful in classifying children before puberty, apart from the fact that they are pre-pubescent. This means that any child before the age of 9 or 10 will be classified as the same in terms of their

sexual maturity rating (Cooper, 2011). Both these issues have a direct impact on an offender's sentencing in England and Wales (see section 2.1.3) and can also have implications for the management of the offender (see section 2.3).

Height, growth charts and body ratios

Another method used to determine age of a child in sexually explicit images and videos is head height to total height ratio. One major advantage this method has over the Tanner Scales is that it can distinguish between children who are pre-pubescent. According to Cooper and Jones (2007) when looking at crown to chin and total height ratios:

- *Toddlers have a ratio of 1:5*
- *School Aged children (5 to 7) have a ratio of 1:6*
- *Young People (about 15) have an approximate ratio of 1:6.5*
- *Adults have a ratio of 1:7.5 or 1:8*

However, there are also many problems or disadvantages with this method. First, there are many qualifying factors. The child in the image or video must be standing or lying straight so that a total height as well as a head height can be properly measured. This is difficult as not all images involve the full view of the child and even less where they are perfectly straight standing up (Cooper & Jones, 2007). There are also issues of distortion, as morphing programs might have been used to manipulate the image in the first place and most of these scales have been standardized with Caucasian children, which could vary from other races (Cooper & Jones, 2007).

Other issues with determining the age of a child

While it was argued above, and by authors such as (Cooper, 2011), that medical and forensic experts can be fairly accurate in determining the age of a child in an abuse image, should they follow specific criteria of what to look at, research by Cattaneo et al. (2009) found that 'experts' were not better at determining age than a 'layperson'. They conducted a study comparing the ability of 'experts', forensic pathologists, paediatricians and gynaecologists to laypersons at determining whether or not pornographic images of a female

depicted someone below the age of 18 years old. They found that there was no significant difference between the experts' and laypersons' ability and that they were all fairly poor at being able to determine the age. While this research has not been repeated on the other key age groups (17-16, 15-13 and below 13 years old) from the sentencing guidelines (SGC, 2003), it suggests that 'experts' are not really experts and our current methods used to determine the age of children in sexually explicit images and videos are not very accurate.

Not all sexually explicit images or videos involving children depict the pubis/genital region of the child or even their face/head. In some images or videos, it might only be the hand or foot of a child that is visible in the presence of adult genitalia or it could be only the child's buttocks that are exposed (Cooper & Jones, 2007). While due to the relative size of the hand or the foot, it might suspected to belong to a child, in these instances it is not possible to determine that child's age based on the methods described above or any other known method (Cooper & Jones, 2007). This is extremely problematic for police forensic units.

Similar to the issue discussed above with sexually explicit videos involving a child and the potential that the video could be classified to fall within more than one level on the modified COPINE scales, a video could also have multiple victims with varying age ranges. While this isn't necessarily an issue for the police or the actual assessment of the video, it could potentially be problematic for the state's case against the offender or the sentencing imposed, depending on how the police forensic unit might have classified or categorised the video (see section 2.1.3). The forensic examiners might list all the victims in the video and their predicted ages (as recommended by Cooper and Jones (2007), or they might just list the age of the youngest child depicted and that of the oldest as an age range.

Real or Pseudo Image

With the aide of computers and image morphing software/technology, image producers can not only morph or change a non-abusive image into an abusive one, they also have the capability of changing the look or age of the

child victim in the abusive image (Cooper & Jones, 2007). One popular method to creating pseudo-images is to take the head of a child and place it on the body of an adult performing sexual acts (Cooper & Jones, 2007). While some of the images are very crude and the untrained eye can clearly tell that they are just that (a child's head on an adult's body) other images are not that clearly distinguishable from genuine SEMIC depicting real children. In the UK, pseudo-images or computer generated images are just as illegal as images of actual children. However, in other jurisdictions like the United States, the law stipulates that the prosecution must prove that the image is that of a real child and pseudo or computer generated images are legal (Akdeniz, 2008).

In the more "professionally" created images (those that don't appear as crudely made), it can be extremely difficult for the specially trained forensic examiners to determine whether an image is real or computer manipulated and even more specifically whether or not the child depicted is under 18 years old. According to Cooper and Jones (2007), forensic examiners first assess whether or not the image has been found in other offenders' collections by consulting one of the super national databases, which also allows them to determine whether or not the child depicted has been previously identified. A positive match would suggest that the image is depicting an actual child and not computer generated and a positive identification of the child victim would confirm that. In the cases where the images have not been found in the databases, the forensic examiner can attempt to identify the children depicted as a way to authenticate the image as real as well as the child's age. Detailed examples of how the Toronto Police department successfully identified numerous children depicted in sexually explicit images and videos can be found in Sher (2007).

No literature was found describing how police forensic units authenticate a photo or sexually explicit image involving a child, proving that it was not manipulated by a computer. However, there are some descriptions of the process in which news agencies authenticate the photographs they use for news stories. Silverman (2012) suggested three variables to check when trying to authenticate a photo: the metadata, the image for tool marks, and the

shadows. He argues that EXIF (exchangeable image file format) metadata of an image sometimes contains clues as to whether or not a photo was last saved by the camera taking it or by a computer programme used to edit it. He also suggests that a close examination of an image might reveal pixel discrepancies or duplications caused by modification tools and that the shadows in an image are really hard to correct or modify (Silverman, 2012). However, Hany Farid, a digital forensic specialist, expressed in an interview the extreme difficulty and complexity of the process of authenticating an image or photo (Kirchner, 2011). This suggests the police likely have a challenge in determining not only whether or not an image is real, but it also calls into question the confidence in their ability to determine the age of the children depicted.

Sex of the children

Determining the sex of the children depicted in an offender's collection of sexually explicit media may be important for both the assessment of that offender's predicted level of risk to recidivate (see section 2.2.2) but this might also have implications to the management of that offender (see section 2.3). When the genitalia of the child victims are visible, determining their sex likely is a straightforward process for the police forensic units. However, not all images and videos clearly depict children's genitalia. In these cases, Cooper and Jones (2007) suggest that waist definition and fat may be indicative of adolescent females and that a shoulder to waist ratio greater than 1.35 may be indicative of an older adolescent male. However, they state that the police forensic units should only report on what is clearly visible in an image or video (Cooper & Jones, 2007). This suggests that the police can either clearly state the sex of the children or likely have extreme difficulty in determining it.

Identifying a Producer of SEMIC

For the reasons explained in section 2.1.3 arguments can be made about why producers should be given stricter punishments than collectors of SEMIC. However, determining whether or not someone was the producer of an image or video becomes more of a challenge for several reasons: not all SEMIC depicts the faces of the adult abusers; not all SEMIC depicts adults abusing children; the

adult depicted in the SEMIC might not be the same person that took the photo or video. One technique used to identify an offender when their face is not visible in the SEMIC is to look for distinguishing characteristics that are clearly definable in the image or video (Cooper & Jones, 2007). This could be identifying marks like tattoos or scars, or should the offender's hand and vein patterns be clear in the image, as is the case with lots of top down shots of fellatio (Cooper & Jones, 2007), the vein patterns on the accused's hand can be compared.

2.2.2: Risk Assessment

Criminal justice social workers have a legal requirement in Scotland, through risk assessment orders, to conduct a thorough assessment of the risk convicted sex offenders pose to reoffend (McMahon, Toal, & Grant, 2008). As described in the previous sections of this chapter, academics and practitioners are still not clear as to whether or not internet sex offenders are a sub group of contact sex offenders, or whether they are a whole new group into themselves. This poses practical and real problems in the risk assessment of internet sex offenders in relation to what tools or methods to use, as well as how accurate those methods might be on this group/sub-group of offenders. This section lays out the methods used to assess risk; the development and use of risk assessment tools; and what factors are the most important in determining risk in the context of contact sexual offenders, as a way to illustrate what might be important in determining what risk internet sex offenders might pose to reoffend. Lastly, this section addresses why the tools recommended by Scotland Risk Management Authority (Davidson, 2006) that practitioners use, the RM2000 and the Stable Acute 2007, might not adequately address internet sex offenders' risk to reoffend.

Approaches to risk assessment

There are two basic approaches that can be used when formulating opinions or drawing conclusions about assessing the risk an offender poses to reoffend. These are professional judgement and actuarial decision-making

(Menzies, Webster, & Hart, 1995; Monahan, 1995). These differ in terms of how much weight is put on each in the decision making process by the practitioner. Professional judgement procedure is based on the premise that the evaluators use a wide range of discretion when it comes to gathering the risk assessment information as well as which information is considered (Hart, 2001). The judgement could be loose and unstructured, varying from professional to professional and sometimes case to case, or it could be very systematic. In contrast, actuarial procedure is based on the premise that decisions are made by professionals according to strict explicit and fixed rules using only the information available to them (Hart, 2001). These actuarial procedures are normally based on statistical evidence and used because they have shown some sort of empirical association to what they are measuring.

Professional judgement

There are at least three different levels or approaches to professional judgement procedures. These are unstructured, anamnestic risk assessment, and structured (Hart, 2001). Unstructured professional judgement is a decision making process that is completely free of guidance and most closely resembles intuition. According to Hart (2001), "it is also very person-centred, focusing on the unique aspects of the case at hand, and thus can be of great assistance in planning interventions to manage risk" (p. 17). However, because of its unstructured nature it is rarely based on empirical evidence and has the major flaw of varying from one professional to another. Two equally qualified practitioners could interview the same offender and come up with two completely different risk assessments based on their own intuition and personal and professional experiences (Hart, 2001). This then means that in most cases the weight or power of the risk assessment is based on the person conducting the assessment rather than the assessment itself (Hart, 2001).

The second type of professional judgement, anamnestic risk assessment, assumes some structure, where the practitioner must identity the personal and situational factors that lead to the person committing the offence in the first place (Hart, 2001). Anamnestic risk assessment also assumes that history will

repeat itself and the offender will commit the crime again if the circumstances that led up to the crime in the first place are not changed. Basically, this form of assessment tends to posit that people are static and do not change and they are only at risk of committing crimes in the future that they have committed in the past.

The third type of professional judgement, structured professional judgement, is a decision making process that is aided by guidelines developed to reflect the present nature of empirical evidence and professional practice (Borum, 1996). (Hart, 2001) says that:

> *these guidelines attempt to define the risk being considered; discuss necessary qualifications for conducting an assessment; recommend what information should be considered as part of the evaluation and how it should be gathered; and identify a set of core risk factors that according to the scientific and professional literature, should be considered as part of any reasonably comprehensive assessment (p. 18-19).*

Professional judgement tends to be more holistic, but takes a considerable amount of time to implement and develop.

Actuarial Procedures

There are many different ways to classify actuarial decision making procedures, but two of the more common classifications are *actuarial uses of psychological tests* and *actuarial risk assessment instruments* (Hart, 2001). Psychometrics, or psychological tests, measure the aspects of a specific person's personality or personal mental disposition through a mathematical or statistical analysis of quantitative data in an attempt to place the subject on a comparative scale (Oxford Dictionary, 2010). Some examples of these would include Hare's psychopathy checklist (Hare et al., 2000), or Hamilton scale for major depression (Hamilton, 1960). Some of these have been empirically linked to predict risk to certain types of crime.

On the other hand, actuarial risk assessment instruments are not designed to measure specific traits or personal psychological characteristics, but are rather designed to predict the future. More specifically they are

designed to predict the likelihood of certain outcomes in a specific population in a set amount of time (Hart, 2001).

Progression of risk assessment

There have been significant advances in the both the empirical evidence supporting risk assessment tools, as well as their predictive validity and the theory/treatment needs behind them. The *first generation* of risk assessment tools was based solely on clinical/professional judgement (Bonta, 1996). As mentioned above, this has its advantages and disadvantages and is still used in some jurisdictions, but has for the most part been discredited.

The *second generation* of risk assessment tools moves from professional judgement to more actuarial risk assessments (Bonta, 1996). These are comprised mostly of static risk factors. According to Proulx, Tardif, Lamoureux, and Lussier (2000), static risk factors are "unchangeable variables such as criminal history (sexual and nonsexual offenses), age and demographic characteristics". Once a static risk factor has been identified for a particular offender, this will never change. Some examples of second generation risk assessment tools are: CRS (Custody Ratings Scale) (Porporino, Luciani, Motiuk, Johnston, & Mainwaring, 1989), STATIC-99 (Hanson & Thornton, 2000), Risk Matrix 2000 (Thornton et al., 2003).

The *third generation* of risk assessments stay with actuarial assessment but starts to add a needs component to the assessment (Bonta, 1996). These tools still have a static risk factor component, but they also add a dynamic risk factor component as well. According to Proulx et al. (2000), dynamic risk factors are "changeable variables. They may be relatively stable, such as sexual preference or rapidly changing such as emotional states". Just because a dynamic factor has been identified once in a risk assessment, does not necessarily mean that the same risk factor will be present in following assessments. Some examples of third generation risk assessment tools are: SONAR (Sex Offender Need Assessment Rating) (Hanson & Harris, 2000), PCL-R (Psychopathy Checklist Revised) (Hare et al., 2000), HCR-20 (Webster, 1997), LSI-R (Level of Service Inventory-Revised) (Andrews & Bonta, 2000), SAVRY

(Structured Assessment for Violence Risk Among Youth) (Borum, 2000) and SARA (Spousal Abuse Risk Assessment) (Kropp & Hart, 2000).

The *fourth generation* of risk assessment tools, moves on from where the third generation left off. These include both static risk factors, but also include two different types of dynamic risk factors. These are *stable dynamic*, which are factors that are relatively stable over time, like whether or not the offender is in a long term relationship, or whether or not they have a job. They also include *acute dynamic* factors that include variables that can change from one day to the next. These include factors like alcohol or substance use, depression, or physical appearance. The fourth generation tools also try to integrate a case management plan, which addresses the stability of the acute dynamic factors and tries to address the problematic stable dynamic factors. An example of a fourth generation risk assessment tool is Stable and Acute 2007 (Harris & Hanson, 2010).

Creation of risk assessment tools

The creation of risk assessment tools provides just as much context to the assessment of risk as the historical context that was just described. Thornton (2002) claims that there are three different approaches that can be used to identify potential risk factors in terms of criminal recidivism. These are:

> *Longitudinal follow-up studies:* In this design, people with previous criminal histories are followed up to see what personal characteristics are statistically related to subsequent re-offending. Such studies are usually viewed as the best methodologically, but are often limited in their ability to identity risk factors for sexual offending by the fact that the base rate for sexual offending may be too low for much in the way of "variables of convenience" (Quinsey, Harris, Rice, & Cormier, 1998). That is, variables that are easy to measure or that are frequently mentioned within official files. The full range of potentially relevant variables may not be captured.

Comparison of groups that differ in their history of sexual offending: Common forms of this design include comparing sexual offenders with non-offenders or with non-sexual offenders. Additionally, it is possible to compare sexual offenders who have only been convicted once with those that have been convicted twice or more. In these types of studies, it is easier to assess the relevance of a broad range of variables. However, the experience of imprisonment and other forms of intervention may be a confounding variable in some comparisons. Thornton (2002) also notes that in the latter type of study, some offenders who have only been convicted once are actually individuals who are going on to commit further offences, and in that sense are in the wrong group, maybe distorting the scores of that group.

Studies of precursors to sexual offending: For example, studies that examine in detail the motivations, actions, thoughts and feelings that were present in the build-up to an offense. Factors occurring repeatedly could be said to be factors related to the commission of offending. The disadvantage of this type of study is that it often relies on clinical judgement, open to bias. On the other hand, such designs usually involve more in-depth, individualised, analysis of offending.

Thornton (2002) suggests that the best approach to creating the most accurate risk assessment tools uses a combined approach trying to encompass as many of these three approaches as possible. While they do not need to be all part of the original design, the final product will benefit greatly from a rounded approach.

Accuracy of risk assessment tools

While it is one thing to use and create these tools, it is another to put blind faith in something that has not been proven to be more effective than clinical judgement (Thornton, 2002). However, most empirical studies suggest that risk assessment tools, and in particular, the fourth generation ones, are significantly better at predicting risk of reoffending in contact sexual offenders

than unstructured clinical judgement alone and better than structured clinical judgement on most accounts (Hanson & Morton-Bourgon, 2009). In a meta-analysis, Hanson and Morton-Bourgon (2005) found that unstructured clinical judgement had an accuracy to predict recidivism at the 95% confidence interval of 0.24 to 0.56 which was significantly less accurate than actuarial risk assessment tools that predicted recidivism at the 95% confidence interval of 0.54 to 0.69. Hanson and Morton-Bourgon (2005) concluded that while not 100% accurate in determining risk to re-offend, current risk assessment tools are significantly better than not using any structured tool and are significantly better than using only clinical judgement.

Most significant factors in predicting risk to recidivate

Numerous empirical studies, mostly validation, have been conducted in an attempt to determine the effectiveness of different static and dynamic factors at predicting the risk of recidivism for contact sexual offenders (Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010). As little is still known about internet sex offenders in relation to their risk to reoffend or to escalate to contact offending (Seto & Eke, 2005), these factors and validation studies are of particular importance in terms of identifying potentially relevant factors that could increase the likelihood the offender will recidivate.

While there are some overlapping risk factors present in all of the tools, there are also some individual factors unique to specific tools. This leads to questions of accuracy and importance of the individual risk factors. Three meta-analyses addressed these issues in which the authors compiled all of the validation studies available at the time, combined the samples and assessed for overall reliability and accuracy on factors present in more than one study and those present in only one (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009).

Hanson and Bussière (1998) in their meta-analysis of 61 unique samples with 28,972 sex offenders found that young age and being single were the only demographic factors that successfully predicted sexual recidivism in contact offenders. They also found that offenders who had prior sexual offences, victims

who were strangers or not related to them, had male victims, began offending at an early age or engaged in diverse sex crimes were more likely to reoffend. However, they found that the strongest predictors of recidivism were sexual deviancy factors that included being sexually attracted to children (verified by penile plethysmograph), more specifically boys, or had deviant sexual preferences. These factors are important as they form the basis of the actuarial static risk assessment tools currently used by practitioners (Static-99; Risk Matrix 2000). They are also important as they might also apply to internet sex offenders (Seto, 2013).

In the meta-analysis conducted by Hanson and Morton-Bourgon (2005), which combined 95 studies creating 1,974 effect sizes on a sample of 31,216 offenders, they also found that deviant sexual interests, as well as antisocial orientation were the most significant predictors of sexual recidivism in contact offenders. Deviant sexual interests included factors like: sexual attraction or interest in children, sexual preoccupation, acts of rape and other paraphilias. These factors are of particular importance with internet sex offenders as they are likely to be sexually attracted to children and depending on the extent of their use of SEMIC/size of their collection, also likely have a very strong sexual preoccupation. Producers of SEMIC involved in contact sexual offences against the children depicted in the SEMIC can be classified as rapists and depending on the severity of the image or video might also have other paraphilias (such as bestiality or sadism).

Antisocial orientation consisted of factors such as: antisocial personality disorder, childhood criminality, history of nonsexual crimes, substance abuse and lifestyle instability (Hanson & Morton-Bourgon, 2005). These factors could also be relevant to an internet sex offender depending on his social circumstances. However, they have not been fully investigated within this offender group (Seto, 2013). Hanson and Morton-Bourgon (2005) also found that emotional identification with children, conflicts in intimate relationships and hostility were also important factors in the prediction of risk of reoffending in contact sex offenders. These factors might also apply in the context of internet sex offenders, but also haven't been tested (Seto, 2013).

The factors that Hanson and Morton-Bourgon (2005) found were least accurate in predicting risk of reoffending in contact offenders included: adverse childhood environment (abuse or neglect as a child), loneliness, low self esteem, lack of victim empathy and denial of sexual crime. These are factors that are likely to be investigated/reported on in internet sex crimes as well.

Risk assessment tools used in Scotland

Scotland's Risk Management Authority recommends that practitioners (criminal justice social workers) use the Risk Matrix 2000 (Thornton et al., 2003) and the Stable Acute 2007 (Hanson, Harris, Scott, & Helmus, 2007) in their assessment of risk among sex offenders, including internet sex offenders (Davidson, 2006, 2007).

The Risk Matrix 2000 (RM2000) is "a two-dimensional risk assessment system for sexual offenders that can classify them for the risk of recidivism" based on weighted and aggravating factors (Thornton et al., 2003). The RM2000 was originally created and cross-validated on a sample of 429 incarcerated male sex offenders in England and Wales who were followed for a period of 19 years. Offenders are scored as a low, medium, high or very high risk to reoffend based on an overall score (Thornton et al., 2003). The scoring consists of three weighted factors: the number of sentencing appearances for sexual offences, the number of sentencing appearances for any type of offence, and the age of the offender at his next opportunity to offend. Offenders who had 5 or more sexual sentencing appearances, 5 or more sentencing appearances for any crime and are between the ages of 18 and 24, score highest on the weighted factors (see Appendix B: Risk Matrix 2000 Scoring Guide, for the full scoring criteria). There are also four aggravating or multiplying factors: *having male victims, having stranger victims, being single (never married) or a conviction for a non-contact offence* (Thornton et al., 2003). The offender's category of risk (low, medium…) goes up one level for every two of the aggravating factors present. Thornton et al. (2003) also claim that the RM2000 "is easier to score than Static-99, and substantially easier to score than the VRAG or SORAG, while yielding comparable predictive accuracy."

The predictive accuracy of the RM2000 was found to be comparably good (high 70s/low 80s areas under the curve) in two other samples of sex offenders in England and Wales (Craig, Beech, & Browne, 2006; Craissati & Beech, 2005). In the United States the RM2000 was moderately accurate (.63 to .67 areas under the curve) predicting the reconviction rates of 566 sex offenders (Knight & Thornton, 2007). Similarly, in Canada there was moderate predictive validity (.60 to .70 areas under the curve) on a sample of 351 sex offenders (Kingston, Yates, Firestone, Babchishin, & Bradford, 2008). Grubin (2011) found that the RM2000 was also moderately accurate (areas underneath the curve in the mid 70s) for a sample of 771 convicted sex offenders in Scotland.

The Stable/Acute 2007 (Hanson et al., 2007) is a fourth generation risk assessment tool (see above) that evolved out of an earlier tool (Stable/Acute 2000) after the results of Canada's dynamic supervision project, which "demonstrated that community supervision officers are able to reliably assess static and dynamic risk factors and predict sexual, violent and general recidivism with levels of accuracy similar to other professionals" (Harris & Hanson, 2010). That static portion of the Stable/Acute 2007 typically utilised the Static-99. However, in the context of Scotland and the UK the RM2000 has been used (Davidson, 2006). The stable factors that are measured by the Stable/Acute 2007 include: capacity for relationship stability, emotional identification with children, hostility towards women, general social rejection, lack of concern for others, impulsiveness, poor problem solving skills, negative emotionality, sexual preoccupation, the use of sex as a coping mechanism, deviant sexual preferences, and deviant sexual interests (Hanson et al., 2007). As with contact sexual offenders, these factors could also apply to internet sex offenders depending on the individual circumstances. The acute factors measured by the Stable/Acute 2007 include: victim access, hostility towards their victims, sexual pre-occupation and rejection of supervision (Hanson et al., 2007). While sexual preoccupation has already been discussed as a potential risk factor for internet sex offender recidivism, victim access and hostility

towards their victims are likely to not be relevant to internet sex offenders as those factors are directly linked to contact offences.

While there is evidence of some of the risk factors used in Stable/Acute 2007 in other risk assessment tools that have generally shown high validity/prediction rates (Mann et al., 2010), there have not been any cross validation studies conducted on the Stable/Acute 2007 (Harris & Hanson, 2010). This suggests that in practice the Stable/Acute 2007 is being used to measure risk of re-offense on all types of sex offenders in Scotland (and the rest of the UK) while it has not been tested or shown to have a strong predictive validity on a Scottish or UK sex offender population. However, there is little evidence to suggest that the Stable or Acute factors measured by the Stable/Acute 2007 would be different in terms of validity or accuracy in a Scottish or UK sample of contact sex offenders than the original Canadian samples the tool was created with.

Issues with the risk assessment tools used in Scotland with internet sex offenders

Neither the RM2000 or the Stable/Acute 2007 have been validated on a sample of internet sex offenders, which could make their predictive validity on risk to recidivate inaccurate on these offenders (Davidson, 2007). As discussed above, numerous studies have assessed suspected factors that might affect a contact offender's likelihood to reoffend and the combined sample meta-analyses led to the creation of the first generation of risk assessment tools. Using the RM2000 and the Stable/Acute 2007 to assess the level of risk an internet sex offender poses to reoffend, makes two assumptions: one that internet sex offenders are the same as contact sex offenders and that they reoffend at the same general rates; and two, that the same factors are relevant for both groups in predicting that likelihood.

As discussed in the previous sections, consensus has not been reached by researchers or academics, and probably even practitioners, as to whether internet sex offenders are the same type of offender as contact sex offenders, just at different stages of their offending "career". In one of the first studies looking at the reoffending rates for offenders who had been convicted of

possessing, distributing or producing sexually explicit media involving children, Seto and Eke (2005) found that offenders who had previous contact offenses were significantly more likely to reoffend (either with a new contact offense, or with a new SEMIC offense) than offenders who were only charged with a SEMIC offense. They argued their results suggest that SEMIC only offenders and SEMIC/contact offense offenders are different in both the type of offenders they are, and also in the likelihood that they are going to reoffend. They did, however, concede that a longer follow-up time was needed.

The difference in reoffending rates found by Seto and Eke (2005) suggests the overall validity and ability to predict the likelihood an internet sex offender will reoffend, using the same risk tools as for contact offenders, would likely be problematic. Similarly, the individual factors used to measure that risk are also likely to be inaccurate. As discussed in the previous section, the RM2000 (Thornton et al., 2003) adds extra rating weight based on whether or not an offender is considered to have deviant sexual offending tendencies. This includes deviant factors such as non-contact offences, male victims and stranger victims. For every two of those deviant tendencies that an offender has, the level of risk based on the tool, goes up a category. However, because internet sex offending, or the collection of sexually explicit media involving children, is non-contact in itself and the significant majority of internet sex offenders do not know the children depicted in the images and videos they possess, by default the lowest score that internet sex offenders can be rated by the RM2000 is medium risk to reoffend. The RM2000 (Thornton et al., 2003) claims that 25% of all offenders who are rated a medium risk, 49% of all the offenders who are rated a high risk and 85% of all the offenders that are rated a very high risk will reoffend within 5 years. However, given that Seto and Eke (2005) found that only 6% of their sample of 75 SEMIC only offenders committed any kind of new offence (only one committed a new contact offense), it is likely that these deviancy factors are inaccurate or weighted incorrectly for measuring internet sex offenders' likelihood to recidivate.

Factors potentially important to the prediction of reoffending risk by internet sex offenders

As discussed in the sections above, the meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) conducted looking at different risk assessment tools and their individual factors found that deviant sexual interests were the strongest predictors of recidivism in contact sexual offenders and are the basis to the aggravating factors of the RM2000 (Thornton et al., 2003). However, the deviancy factors, as used in the tools, are not accurate in predicting the risk of recidivism for internet sex offenders. Also, and as discussed in previous sections, the police forensic units assess the offenders' collections of SEMIC for specific characteristics some of which could be considered measures of deviancy: the severity of the images or videos in the collections based on the modified COPINE scales, the sex of the children depicted and the age of the children depicted. The quantity of the images or video could also potentially be linked with deviant sexual preoccupation. While Seto et al. (2010) explored the explanations given by internet sex offenders, which took into account those deviancy factors, the relationship between those particular factors or characteristics that can describe an offender's collection of SEMIC and the likelihood an offender would reoffend have not been addressed. This is one of the exploration points of this thesis.

2.2.3: Summary of Assessment

As discussed in the previous sections, the police forensic units assess internet sex offenders' collections of sexually explicit media involving children, to help determine whether or not a crime was committed (was the content illegal), to help with the prosecution's building of a case against the offender (producers and distributors do not have a defence) as well as to assist with the sentencing of that offender (at least in England and Wales). The characteristics they assess include:

- the number of images/videos in the collection
- severity of the image or video (based on the modified COPINE scales)

- whether or not the children depicted in the images or videos are real or whether it is a pseudo image;
- sex and age of the children depicted;
- identity of the children depicted;
- identity of the adults/sexual abusers in the images/videos;
- when the images or video was created
- where the images or videos came from

Also, and as discussed in the previous sections, criminal justice social workers in Scotland have a legal requirement to assess the level of risk an internet sex offender poses to reoffend (McMahon et al., 2008). Meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009; Mann et al., 2010) have suggested that deviant sexual interests and anti-social orientation are the strongest predictors of recidivism for contact sexual offenders, which are the factors that risk assessment tools seem to focus on. The RMA in Scotland recommends that practitioners use the RM2000 and the Stable/Acute 2007 to assess all sexual offenders' levels of risk to recidivate. However, those tools have never been validated on a sample of internet sex offenders (Davidson, 2007). The factors these tools deem important can be seen in Table 2.2.1 (Hanson et al., 2007; Thornton et al., 2003).

Table 2.2.1: Risk Assessment Factors

Static Factors	Stable Factors	Acute Factors
Number of sentencing appearances for sexual offences	Lack of relationship stability	Victim Access
Number of sentencing appearances for any type of offence	Emotional identification with children	Hostility towards their victims
Offender's age between 18 and 24	Hostility towards women	Sexual preoccupation
Having male victims	General social rejection	Rejection of supervision
Having stranger victims	Lack of concern for others	
Being single (never married)	Impulsiveness	
Conviction for a non-contact offence	Poor problem solving skills	
	Negative emotionality	
	Sexual preoccupation	
	The use of sex as a coping mechanism	
	Deviant sexual preferences	
	Deviant sexual interests	

2.3: Management

A multi-agency approach is required by law for the management of sexual and violent offenders in Scotland as well as the rest of the UK (Davidson, 2007). Multi-agency public protection arrangements (MAPPAs) require that the police, the prison service and the local authorities (criminal justice social work) share the responsibility for the assessment of risk and the management of sexual offenders, which includes internet sex offenders. There are two main strategies used to manage sex offenders: containment, either through imprisonment or through community management and treatment. The decisions made by practitioners in relation to which management strategies are most appropriate are usually linked to the assessment of risk regarding the offender. As discussed in the previous section (2.2.2), practitioners tend to utilise information gathered about the offender's offending behaviour,

demographic characteristics, and attitudes and beliefs related to the crime when conducting risk assessments for sex offenders. This section is divided into three subsections: imprisonment, community management and treatment.

2.3.1: Imprisonment

In some jurisdictions (mainly the United States) there is a trend to punish offenders who have been convicted of the possession, distribution and production of sexually explicit media involving children with prison sentences. Wolak, Finkelhor, and Mitchell (2005a) found that 59% (N=677) of the offenders in the National Juvenile Online Victimization Study who were convicted for internet related possession of SEMIC for the 12 month sampling period in 2000 were given some sort of custodial sentence: 17% were sentenced to less than 1 year in prison, 25% were sentence to between 1 and 5 years and 4% were sentenced to more than 5 years. Hessick (2010) argues there has been a marked increase in the penalties imposed, as the minimum sentences allowed in the United States for those offenders who have been convicted of the less "severe" possession charge have increased 28 times since 2000. Federal sentencing guidelines (United States Sentencing Commission, 2013) now mandate those offenders who are convicted for the possession of SEMIC serve at least 5 years in prison and can be punished up to 20 years dependant on "escalating enhancements".

Basbaum (2009) describes the federal case against Thomas Cunningham in which he was sentenced to over 10 years in prison for the possession of 144 images and 1 video. He was 54 years old and had no prior convictions. According to Basbaum (2009), the sentence was over the minimum 5 years due to the fact that Cunningham possessed a "large" collection of SEMIC where some of the images depicted pre-pubescent children, while others were sadistic in nature. The sentence was also increased due to Cunningham's use of a computer in the collection of the SEMIC and for distributing some of the images (Basbaum, 2009). Hessick (2010) suggests that some states are treating each possessed image or video as a separate incident and are imposing sentences for each of the

images possessed. She described an Arizona case in which a man was sentenced to 200 years for the possession 20 sexually explicit images involving a child.

Hessick (2010) and Basbaum (2009) both argue that the escalating enhancements (large quantity of images or videos; children depicted under 12; children depicted under 16; depiction of sadistic acts; distribution of SEMIC) used by the US sentencing guidelines with regards to possessors of SEMIC are out of line with the nature of the offence. Hessick (2010) states that:

> *the same Arizona state sentencing regime that sent a defendant to jail for two hundred years for possession of child pornography also imposed a fifteen-year sentence on another defendant who twice molested a six-year-old girl; imposed a twenty-two-month sentence on a priest who molested an altar boy; and imposed a one-year sentence on a man who kidnapped and sexually assaulted a fourteen-year- old girl who was selling candy door-to-door (p. 862).*

Basbaum (2009) discusses how the enhancements relating to the quantity of images and videos (2 level increase for more than 10 images; 3 level increase for more than 150 images; 4 level increase for more than 300 images and 5 level increase for more than 600 images) does not fit with the empirical evidence on offending behaviour. On average it has been found that offenders who have been charged with possessing SEMIC have more than 600 images in their collections (see section 2.1.3). Similarly, both Basbaum (2009) and Hessick (2010) argue that the "use of computer" enhancement as well as the distribution enhancement also fall within the normal offending behaviour of these offenders, with the empirical evidence suggesting most if not all convictions for the possession of SEMIC were internet related and Wolak et al. (2011) reporting that that large number of collectors use peer 2 peer networks as a source (see section 2.1.3). Basbaum (2009) argues that "once an enhancement becomes so common that it is triggered in the majority of cases, it ceases to be an 'enhancement' at all, but instead constitutes a core part of the offense" (p. 1300).

The use of custodial sentences or imprisonment in the United States for possessors of SEMIC seems to contrast markedly from the sentences imposed on similar offenders in Scotland and the United Kingdom. As seen in Table 2.3.1, Akdeniz (2008) suggests that the custodial threshold, based on an Appeals court ruling (Oliver), should include the act of distribution or at least possession of level 3 SEMIC. The most severe punishments for offenders who only possessed SEMIC appear to a maximum of 3 years' imprisonment and that is reserved for offenders who were in possession of large quantities of level 4 and level 5 images and videos. While this court ruling doesn't apply to Scotland, it would be expected that similar sentencing criteria would be in place.

Published crime statistics in the UK do not appear to separate out offenders who have been convicted and sentenced of SEMIC related offences. As a result, it is not possible to determine the number of offenders who have been given custodial sentences. Although based on anecdotal conversations held with practitioners in Scotland, it would seem that the majority of the offenders have been given community sentences where they are required to participate in community based sex offender treatment programmes, with custodial sentences reserved for the most extreme cases.

As discussed above in relation to the information relevant for sentencing offenders in the United States, as well as in section 2.1.3 for the information relevant for sentencing in England and Wales, there appears to be some overlap in relation to custodial sentencing practice between these nations. Both jurisdictions find the quantity of SEMIC important, as well as the deviancy or severity of the images or videos and the age of the children depicted. What the US considers a large amount however, seems to vary from what the courts in England and Wales have considered to be a large amount. Based on different court rulings, Akdeniz (2008) argues that a large quantity of images and videos is likely to be in the thousands rather than the hundreds in England and Wales. Both jurisdictions also seem to take into consideration other offending behaviours, such as whether or not the offender shared, distributed or showed the images and videos to or with others and whether or not the offender

produced or created any of the images or videos (SGC, 2003; United States Sentencing Commission, 2013).

Table 2.3.1: Oliver sentencing guidelines (Akdeniz, 2008)

Recommended Sentencing	Reason for Sentence
Fine	If the offender was merely in possession of material solely for own use, including cases where material was downloaded from the Internet but was not further distributed, and either the material consisted entirely of pseudo-photographs, the making of which had involved no abuse or exploitation of children, or there was no more than a small quantity of material at Level 1.
Conditional Discharge	If the defendant pleads guilty and has no previous convictions. But a discharge should not be granted for the purpose of avoiding the requirement of registration under the Sex Offenders Act 1997.
Community Sentence	The offender was in possession of a large amount of material at Level 1 and/or no more than a small number of images at Level 2, provided the material had not been distributed or shown to others. For an offender with the necessary level of motivations and co-operation, the appropriate sentence would be a community rehabilitation order with a sex offender programme.
Custody Threshold	If any of the material has been shown or distributed to others, or in cases of possession, where there is a large amount of material at Level 2, or a small amount at Level 3 or above.
Custodial sentence up to 6months	This would generally be appropriate in a case where (a) the offender was in possession of a large amount of material at Level 2 or a small amount at Level 3; or (b) the offender has shown, distributed or exchanged indecent material at Level 1 or Level 2 on a limited scale, without financial gain.
Custodial sentence between 6 and 12 months	This would generally be appropriate for (a) showing or distributing a large number of images at Level 2 or 3; or (b) possessing a small number of images at Level 4 or Level 5
Custodial sentence between 12 months and 3 years	This would generally be appropriate for (a) possessing large quantities of material at level 4 or 5, even if there was no showing or distribution of it to others; or (b) showing or distributing a large number of images at Level 3; or (c) producing or trading in material at Levels 1 to 3.
Sentences longer than 3 years	These should be reserved for cases where (a) images at Level 4 or 5 have been shown or distributed; or (b) the offender was actively involved in the production of images at Levels 4 or 5, especially where that involvement included a breach of trust, and whether or not there was an element of commercial gain; or (c) the offender had commissioned or encouraged the production of such images. An offender whose conduct merits more than three years will merit a higher sentence if his conduct is within more than one of categories (a), (b) and (c) than one where conduct is within only one such category.
Sentences approaching the ten-year maximum	These will be appropriate in only very serious cases where the defendant has a previous conviction either for dealing in child pornography, or for abusing children sexually or with violence. Previous such convictions in less serous cases may result in the custody threshold be passed and will be likely to give rise to a higher sentence where the custody threshold has been passed.

2.3.2: Management in the community

Offenders who are not given custodial sentences as well as offenders who have been released from prison, are managed in the community. For offenders who have been convicted of sexual crimes, this management is likely to be jointly shared between criminal justice social workers and the police (McMahon et al., 2008). Following the Protection of Children and Prevention of Sexual Offending (Scotland) Act (2005), the courts in Scotland were given the power to place civil restrictions on offenders in the hopes of preventing future serious sexual harm to children or the community. One of those powers is called Sexual Offences Prevention Orders (SOPOs), which can be imposed for a minimum of five years and an indefinite maximum. The judiciary is free to set whatever restrictions they feel necessary, however they need to be justified (in terms of mitigating risk of potential future sexual harm), proportionate and the restriction must be capable of being policed effectively (McMahon et al., 2008). While there is no empirical evidence researching the use of SOPOs and the type of restrictions imposed, some news reports and some recent appeals court cases provide some insight into some of the restrictions placed. These include: possessing a computer, mobile phone or other technical device capable of taking photographs or downloading photographs from the internet; using the internet; and having unsupervised access to children ("Regina v Mortimer," 2010).

These restrictions themselves are not necessarily the focus of this thesis. However, one of the central facets of this thesis is exploring the information collected and used by criminal justice social workers and the police in relation to internet sex offenders, which has particular importance in the potential decisions they are making when recommending specific restrictions to the judiciary for the management of these offenders. The following subsections explore some of those restrictions in more depth and how some information related to an offender's behaviour might be useful when making those recommendations for restrictions.

Restrictions on internet or technology use

One of the restrictions of liberty that could be used on offenders that have been convicted of possession, distribution and creation of sexually explicit media involving children, could be the prohibited use of the internet. As discussed above, while there has been no research into the use of SOPOs on internet sex offenders with regards to how frequently orders prohibiting them from using the internet have been applied, appeals court cases suggest that they are used quite commonly. Tracing their use through time, based on appeals court rulings, suggests that the liberty restrictions started out with a total ban of the internet, which was later ruled to be too prohibitive and was relaxed to banning the use of the internet for means other than school, work or seeking employment (R v Hemsley, 2010). This was again challenged and on appeal found to be too prohibitive in a modern context:

> *it is disproportionate because it restricts the defendant in the use of what is nowadays an essential part of everyday living for a large proportion of the public, as well as a requirement of much employment. Before the creation of the internet, if a defendant kept books of pictures of child pornography it would not have occurred to anyone to ban him from possession of all printed material. The internet is a modern equivalent (R v Mortimer, 2011).*

Similarly, looking at appeals court cases (R v Hemsley 2010, R v Mortimer 2011 and R v Smith and others 2011), it appears as though there was a total ban on the owning or use of technology, which included computers, cameras and mobile phones that had photo-taking capabilities. The appeals courts have ruled these restrictions are both impossible to police/monitor, as well as excessive in light of the fact that mobile phones lacking the ability to take photographs or videos are extremely rare given the modern state of technology (R v Mortimer). The appeals courts have suggested that instead of total bans on the use of technology, offenders should notify the police or the criminal justice social workers in charge of their management: 1.) of their ownership or use of said

technology within days; and 2.) provide a log or history of all activities carried out using the technology upon request (Gillespie, 2011b). The court rulings suggest these restrictions will strike a better balance between restricted use and management/policing (Gillespie, 2011b).

However, simply notifying criminal justice social workers of the use of technology might not be enough to effectively monitor and manage the offenders. People, especially those who collect objects, are creatures of habit; their behaviours are predictable in that they follow patterns of their past behaviours (Anderson, Damasio, & Damasio, 2005). It might be more effective for practitioners to monitor the specific behaviours relating to the offender's offence to make sure they are not repeating those behaviours. For example, an offender who previously was known to use encryption, passwords or a complicated file structure to hide evidence of his collecting of SEMIC, has the knowledge and skills to do it again. These offenders could be prohibited, with SOPOs, from using passwords or encryption software and any search of an offender's computer would likely need to be more invasive or in-depth. Similarly, if an offender was heavily involved in the social networking side of SEMIC, was a big user of forums, peer 2 peer networks or special groups, his involvement in these social aspects again could suggest repeat illegal behaviour. The practitioner responsible for monitoring such offenders could specifically monitor for these interactions or on a more specific preventative level, a SOPO could ban an offender's involvement in social networks and he could be prohibited from using peer 2 peer networks.

The total ban on owning, using or operating a device capable of taking photographs or videos might be a reasonable prohibition for someone who has a history of producing SEMIC. However, banning their use or ownership for an offender that has a history of only collecting or distributing could be a bit excessive. As described in section 2.1.4, there is not necessarily an escalation link between those offenders who collect or distribute and those who produce SEMIC.

Limited access to children

One of the overarching themes this chapter has been trying to address is the notion that while the literature and research is starting to suggest that internet sex offenders are not wholly the same as contact sex offenders who target children in terms of their behaviour, the characteristics that describe them and the risk they pose to reoffend, practitioners' understanding of them, as well as the assessment and management of them, is borne out of their understanding of contact sexual offenders who target children. This is potentially important in relation to whether or not an internet sex offender will be allowed access to children or more specifically whether or not he or his minor children will need to be removed from the family home.

As described above, SOPOs were created to protect the public from future harm and in the case of contact sex offenders who target children, prevent the future victimization of children. While there is no empirical research to demonstrate how frequently SOPOs are being used in this way, practitioners have the power to prevent or restrict access to minor children by offenders who have been convicted of a range of offences, but most notably sex offences (McMahon et al., 2008). However, some recent appeals court cases ("Regina v Mortimer," 2010) might provide some insight to how they are being applied and potentially how frequently. It is likely that most offenders who were convicted of any sexual offence involving children would have had SOPO restrictions similar to what was being challenged in R v Mortimer, suggesting the offenders would not be allowed unsupervised access to children, essentially meaning that an offender would not be able to live in the same house as his own children if they were under the age of 18 years old. Similarly, while there is no academic research investigating the use of SOPOs for those offenders convicted of the possession and distribution of SEMIC, other appeals court cases seem to suggest that offenders who have no history of contact offending were also being prohibited from living with and having unsupervised access to their children (Gillespie, 2011b).

While several recent appeals court rulings have upheld the use of SOPOs to restrict offenders' contact with children, R vs Smith and Others (2011)

specifically states that this is only permissible on the basis of a risk assessment determining that such restrictions are warranted (Gillespie, 2011b). Given that internet sex offenders are likely being assessed using risk assessment tools (RM2000; Stable/Acute 2007) designed for, and validated on, contact sex offenders, as discussed in section 2.2.2, the risk to reoffend is likely being over estimated and a large portion of offenders who have been convicted only for possession of SEMIC are likely prevented from living with, and having access to, their children. Also, and as previously discussed in section 2.2.2, while little is known about what factors might increase the likelihood that an internet sex offender might escalate to contact offending, the few studies that have looked at recidivism risks (Seto & Eke, 2005; Seto et al., 2011), have found that very few offenders without a history of contact offending against children actually go on to reoffend.

However, given that Seto et al. (2006) argue that being in possession of SEMIC depicting prepubescent children is more indicative of having a sexual preference for prepubescent children than actually committing a contact offense against a child, there might be some scope to use an offender's collection of SEMIC to better understand the risk he might pose to specific types of children. Glasgow (2010) argues the "digital evidence" found within an offender's collection of SEMIC is "a golden opportunity to analyse unequivocal evidence of sexual and possibly also personal deviance known to be associated with risk" (p. 87). In describing the internet sex offender profiling system (ISOPS), Glasgow (2010) suggests this assessment for sexual and personal deviance can be achieved by investigating the offender's collection for images and videos that are likely to be "preferred" by the offender. This is accomplished by focusing mainly on files that have either been camouflaged or set-up in a way to access them regularly and quickly. This could be through changing the names of files or folders, moving them to external devices or attempting to hide them through encryption or camouflage. He suggests that finding a "preferred" type of image category likely points to that offender's deviant sexual interest and that these categories could then be used to form a risk profile (Glasgow, 2010). Glasgow (2012) provides an example of this; he describes a man who was

convicted of possessing SEMIC four years ago and has now formed a new relationship with an adult woman who has a 10-year-old son with Downs Syndrome. His self-declared sexual interest was in adults and adolescent females and he would have been classified as a low to medium risk to reoffend on the static risk assessment tools. Upon investigation of his collection of SEMIC, there was no evidence suggesting he had a preference for any material depicting restraints, sado-masochism or coercion; his preferred images depicted adults or pubescent females; and there was evidence of an increased internet usage suggesting a sexual preoccupation. It was concluded that because there was no evidence he had a sexual preference for pubescent boys, or males in general, that he would be of little to no risk to offend against his new stepson.

This suggests that specific details relating to the offender's collection of SEMIC, as well as some of his behaviour patterns, are important in potentially determining what risk an offender might be to the minor children to whom he might have unrestricted access. This is one facet that will be explored by this thesis. More specifically, this thesis is going to assess the extent to which criminal justice social workers utilize this information in making decisions relating to whether or not to prevent the offender from having access to his children.

From the limited media reports and appeal court's rulings, as discussed above, in general it appears as though practitioners assume all internet sex offenders are the same and approach their community-based management in similar if not identical ways. While there is no direct research to suggest that this is incorrect, the previous sections in this chapter have attempted to provide evidence that internet sex offenders are not all the same and their management requirements could be different not only from other internet sex offenders, but also that of contact offenders who target children.

2.3.3: Treatment

Practitioners' approaches to the treatment of internet sex offenders appears to make the assumption that internet sex offenders are similar, or the same type of offender, as contact offenders who target children (Seto, 2013). As

discussed in previous sections of this chapter, little is known about the differences between contact sex offenders who target children and internet sex offenders. In many municipalities internet sex offenders are treated alongside contact offenders, however this has caused some debate as to whether or not this is appropriate (Seto, 2013). In other municipalities, specific treatment programmes have been created or special internet only groups have been established (Middleton, 2008).

In both offender groups (internet sex offenders and contact sex offenders), however, it has been suggested that treatment models should focus on the dynamic risk factors (see section 2.2.2) that have been linked to increased likelihood of recidivism and which can also be changed (Andrews & Bonta, 2010). This include factors related specifically to: sexual self regulation (sexual preoccupation, deviant sexual interests, use of sex as a coping mechanism); general self regulation (impulsivity, negative emotionality/hostility); intimacy deficits (general social rejection, emotional identification with children, lack of concern for others, hostility towards women); social influences; and the lack of cooperation with supervision (Cortoni & Marshall, 2001; Hanson & Harris, 2001; Hanson et al., 2007). As discussed in section 2.2.2, some meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) found that sexual preoccupation and deviant sexual interests were the best predictors of sexual recidivism, along with antisocial orientation and lifestyle instability. These factors and how they related to the treatment of contact sex offenders who target children, as well as internet sex offenders, will be discussed below.

Sexual Preoccupation

Sexual preoccupation can also be described as a sexual addiction or hyper sexuality in that it is characterized as a condition in which some form of sexual behaviour is employed in a pattern encompassing two key features: recurrent failure to control the sexual behaviour, and continuation of the sexual behaviour despite significant harmful consequences (Goodman, 1992). The most common approach to the treatment of sex offenders who have issues with

sexual preoccupation appears to be the relapse prevention model (Conroy, 2006). This is a cognitive-behavioural approach in which it is assumed that an offender will move in a predictable linear fashion when committing a sexual offence (Marques, Wiederanders, Day, Nelson, & van Ommeren, 2005). This is similar to an addiction model where a person who has been without alcohol or drugs for a significant period of time might make moves towards using it again. This treatment model works by teaching offenders how to identify triggers or situations that might increase their chance of relapse (Marques et al., 2005). Once the offenders are taught how to identify those situations, they are taught strategies to avoid those situations or coping mechanisms for situations that they might not be able to avoid (Marques et al., 2005). For contact offenders who target children, a trigger might be becoming aroused by a child seen in the street and a relapse could be visiting a school or playing with children on the playground.

Reasonably, this model is assumed to work well for internet sex offenders too, as some of the triggers and relapses could be quite similar or the same (Seto, 2013). For example, a trigger for an internet offender could be viewing adult pornography and a relapse might be masturbating to images of clothed children found in catalogues or magazines. This suggests that the size of an internet sex offender's collection of SEMIC or the amount of time the offender spent online collecting, distributing or producing SEMIC might be important factors in his treatment. Similarly, the amount of time an offender actually spent masturbating or fantasizing about the children depicted in the images could also be important to his treatment.

Deviant Sexual Interests

Modifying the deviant sexual interests of a sex offender is also one of the target goals of sex offender treatment programmes. Marshall and Laws (2003) suggest that in the 1970's this was accomplished through behaviour aversion or modification therapy. This utilised Pavlov's classical conditioning theories or Skinner's operant conditioning theories to "repair" sexual gratification with acceptable norms or extinguish the link between deviant arousal and pleasure

through punishment. For example, Marquis (1970) suggested that offenders could decrease their deviant sexual interests by masturbating to fantasies and images depicting appropriate adult relationships. Another example attempted to pair an aversion stimulus (such as a shock or bad smell) with deviant sexual fantasies and images in that offenders were exposed to deviant material while being shocked or forced to smell adverse objects (Laws, Meyer, & Holmen, 1978; Quinsey, Bergersen, & Steinman, 1976). While these behaviour modification treatment programmes were found to be successful in treating contact offenders who target children (Kelly, 1982), cognitive therapy, which focused on the ideas or thoughts that motivated behaviour also proved to be successful at treating sex offenders (Marshall & Laws, 2003).

Modern cognitive-behavioural treatment programmes help offenders to understand the link between deviant sexual fantasies and their offending behaviour by teaching them strategies to control and modify their own arousal (Hudson, 2005). It is thought that these modifications can help prevent a contact sexual offender from reoffending by breaking the link between fantasy and action as well as diminishing the strength of the fantasies.

While studies have suggested sex offenders with deviant sexual interests are of a higher risk of reoffending than offenders without deviant sexual interests, very few sex offenders in general have been found to have deviant sexual interests (Marshall & Fernandez, 2000). The offenders who are found to have deviant sexual interests (based on evidence from convictions; or phallometric assessment) are usually targeted with more intensive treatment programmes than offenders who lack deviant sexual interests (Hudson, 2005). Given that internet sex offenders are likely to have deviant sexual interests on a varying scale, those with more deviant interests might need more intensive therapy. These offenders could have been in possession of level 4/5 images and videos, or images and videos that depicted boys or very young children.

Antisocial Orientation and Lifestyle Instability

Another target for sex offender treatment, is an offender's antisocial traits, which include: poor relationship management and intimacy deficits,

general loneliness, substance abuse and addictions and job stability (Hudson, 2005). Mann and Beech (2002) argue that sex offenders with low self-esteem fail to regulate their behaviour due to a faulty perception that they are not in control of their own lives. Groth et al. (1978) typologies discussed in section 2.1.4 (fixated vs. regressed) as well as some other research suggests that sex offenders (including those that target children), use sex as a coping mechanism for dealing with stress (Cortoni & Marshall, 2001). Cognitive-behavioural treatment programmes for sex offenders teach offenders to identify those stressors or triggers that might cause them stress and teach them coping strategies as an alternative to sex. Some of the more psychoanalytic treatment programmes look for childhood causes of these antisocial traits, such as abuse or neglect and attempt to move the offenders past those problems (Hudson, 2005). Most of the programmes seem to incorporate some sort of positive psychology into the offenders treatment in an attempt to increase the offenders feeling of self-worth by focusing on the offenders strengths (Marshall et al., 2002). Any addictions or substance abuse problems that the offenders might have identified as a trigger for his sexual offending would be addressed as well.

There is a lack of empirical research looking into the types of treatment programmes used on internet sex offenders (Seto, 2013). However, there is no research to suggest that targeting or addressing anti-sociability issues will not be useful for internet sex offenders as well. The offender's relationships, general outlook on life as well as any addictions or substance abuses, can be targeted and hopefully effectively treated.

Offenders' attitudes toward the crime

Offender attitudes towards the crime they have been convicted for have strong ties into their treatment prognosis. Andrews and Bonta (2010) argue that responsivity, or the interaction between the offender and treatment is extremely important. Denial is likely to be an attitude that can affect not only an offender's treatment outcome, but also whether or not he takes part in the treatment process to begin with. Several studies have found that contact sex offenders who fail to admit guilt are likely to feel that they do not require

treatment and subsequently they do not partake or successfully complete (Hunter & Figueredo, 1999; Levenson, 2011; Levenson & Macgowan, 2004; Schneider & Wright, 2001). As discussed in section 2.2.2, Hanson and Morton-Bourgon (2005, 2009) in their meta-analyses did not find a link between denial and recidivism. However, they did find a link between failure to complete treatment and recidivism, adding more weight to the importance of overcoming denial in treatment for contact sex offenders who target children. Several treatment programmes have modules or units designed specifically for offenders who deny any involvement in the crime or other denial facets, such as denying that it was their fault or that the victim actually suffered (Levenson, 2011), providing practice based support for the importance of overcoming denial.

Several studies have shown that a large proportion of contact offenders who target children deny having any involvement in the alleged abuse (Cooper, 2005; Kennedy & Grubin, 1992; Nugent & Kroner, 1996). However, similar rates have not been found in internet sex offenders. In one study, Seto et al. (2010) found that the vast majority of offenders in both of his samples (86% and 91%) admitted guilt. No studies were found assessing the frequency of denial amongst internet sex offenders in comparison to the denial rates of contact sex offenders who target children. This suggests that denial is potentially not as big of a factor for the treatment of internet sex offenders.

Yates (2009) describes the probable link between a contact sexual offender's denial and the cognitive distortions likely occurring. She makes a distinction between offenders who deny for social construct reasons and self-image reasons. For example, contact sex offender who targets children might deny he committed any offences because at some level, he realises that his behaviour was harmful, and by denying it, he justifies and internally protects himself from his harmful behaviour. Conversely, a different contact offender who targets children might deny, to others (perhaps loved ones or colleagues), that they assaulted their victim, as admitting to committing such an act might lessen the status of the offender in the eyes of others. Parallels can potentially

be drawn between contact offenders and internet sex offenders in considering whether the latter admitted guilt.

Addressing an offender's remorse or feeling of empathy towards the victims, is another one of the offender's beliefs that are targeted in treatment. Research has shown that a large proportion of sex offenders lack remorse or empathy for their victims (Hudson, 2005). Beech and Fisher (2004) suggest that by increasing the amount of remorse the offender feels, future offending might be deterred. One way this has been accomplished in treatment has been to provide written or visual accounts of victim experiences (Hudson, 2005). Role-play in group therapy in which offenders play both the victims and perpetrators in offences, have been shown to be effective at increasing the amount of remorse or empathy a sex offender who targets children feels towards his victims (Pithers, 1994).

Nothing in the published research suggests that similar treatment methods to increase the amount of remorse felt by internet sex offenders who have produced SEMIC through the abuse of a "real" child would not be as effective. However, internet sex offenders who have only collected or distributed sexually explicit images or videos involving children might find it hard to empathise with victims who they have not physically abused themselves. A common defence or minimization used by offenders who only collect or distribute SEMIC is that there wasn't a victim (Seto, 2013). This would likely need to be addressed first. The prevalence of offenders who only collect or distribute SEMIC and who lack remorse for the victims has not been reported in any studies, something this thesis hopes to investigate.

Effectiveness of Treatment

Seto (2013) argues that randomized control trials are the gold standard to test the efficacy of sex offender treatment programmes. Very few programmes, however, have been tested using such a methodology, likely due to both practical and ethical reasons (Marshall & Marshall, 2007). One programme, California's SOTEP, and consequent research study, was described by Rice and Harris (2003) as "the most well designed and executed study the

sex offender treatment field has ever seen, or is likely to see for some time". That programme and follow-on evaluation, utilized a randomized control trial protocol. The results, however, did not show any significant difference in recidivism rates between those sex offenders who completed treatment and those who either did not complete or did not participate in the first place (Marques et al., 2005). This has led some to suggest that treatment programmes are not effective in lowering the likelihood that an sex offender will reoffend (Seto, 2013). Others, however, have suggested alternatives, like assessing individual treatment outcomes, which have shown some more promising results (Marshall & Marshall, 2007).

There have not been any published studies looking at the effectiveness of generalized sex offender treatment programmes when comparing contact sex offenders who target children to internet sex offenders. Similarly, there have not been any published studies addressing the effectiveness of programmes specifically designed for or ran exclusively with internet sex offenders. However, and as already discussed, very few internet sex offenders appear to recidivate or move onto contact offending, suggesting that treatment programmes for some internet sex offenders might not be necessary (Seto & Eke, 2005). Research investigating which internet sex offenders need treatment and which ones do not, has not yet been conducted. Seto (2013) argues this is the natural progression of research and following conclusive studies on risk factors for internet sex offenders, comprehensive treatment programmes will be established and evaluated.

Internet sex offender treatment programmes

The lack of empirical evidence has not stopped the prison service in England and Wales from developing their own treatment programme for internet sex offenders. The i-SOTP (Internet Sex Offender Treatment Programme) utilizes the relapse prevention model, but also incorporates elements of a 12-step addiction model, some self-help guidance and some positive psychology (Hayes & Middleton, 2006). The programme has modules that (Middleton, 2008):

1. *Increase motivation, decrease denial and identify and reduce discrepancy between perceived pro-social values and behaviours (addressing distorted attitudes).*
2. *Challenge offence-supportive attitudes and behaviours (addressing distorted attitudes).*
3. *Build an empathetic response to identifying that children depicted in the indecent images are real victims of child abuse (addressing distorted attitudes and socio-affective functioning).*
4. *Reduce use of sex as a strategy for coping and emotional avoidance, replacing it with effective problem-solving strategies (addressing socio-effective functioning and self management).*
5. *Develop adequate relationships, intimacy and coping skills: improve self-esteem and internal locus of control (social adequacy factors and self-management).*
6. *Develop realistic relapse-prevention strategies and new pro-social lifestyles goals (addressing self-management and socio-affective functioning).*

Middleton (2008) argues, however, that not all internet sex offenders will be appropriate for the i-SOTP. He suggests that offenders with a history of contact offences, or potentially those who produced sexually explicit images and videos involving children and those offenders who have a high deviancy on a psychometric response will be better suited to a treatment programme that is longer and more geared towards contact offenders who target children. The deviancy measures suggested include: low victim empathy, strong cognitive distortions (failure to admit guilt), emotional congruence with a child, low self esteem, loneliness, poor locus of control and high personal distress (Henry, Mandeville-Norden, Hayes, & Egan, 2010). This suggests some of the information related to the offender's offending behaviour as well as his social circumstances and attitudes related to the crime might be important in determining which type of treatment programmes is suitable.

2.3.4: Summary of Management

As discussed in the previous sections, practitioners have a legal requirement in the UK to manage sex offenders (which includes internet sex offenders) (Davidson, 2007). Management strategies take the form of containment (imprisonment and community management) as well as treatment. Factors relating to offending behaviour, as well as social circumstances and the offender's attitudes toward the crime, are potentially important in determining which management options are most appropriate, which can be seen in Table 2.3.2. However, this does not always appear to be the case, as in some instances (SOPOs), practitioners seem to be making recommendations assuming that all internet sex offenders are the same.

Table 2.3.2: Factors important for offender management

	Potentially Important Factors
Imprisonment	• Previous convictions • Size of Collection • Level of Image/Videos • Age of Children Depicted • Whether or not he distributed • Whether or not he produced images • Whether or not there was financial gain • Whether or not a computer was used
Community Management	• Access to children • Social circumstances • Level of Image/Video • Age of the Children Depicted • Whether or not he produced • Where/how the images and videos were stored • Intelligence/aptitude of the offender
Treatment	• Deviant Sexual Interests (age of the children depicted, sex of the children depicted, severity of the image/video) • Sexual Preoccupation (size of the offender's collection, amount of time spent collecting, distributing, producing SEMIC, amount of time spent masturbating to SEMIC • Offender's Age • Social circumstances (job stability, relationship status, overall mood) • Attitudes toward the crime (Guilt and Remorse)

2.4: Summary of Literature

This chapter has discussed what information might be important for practitioners (both criminal justice social workers and the police) to collect and analyse when assessing and managing internet sex offenders drawing on parallels between contact sex offenders who target children and internet sex offenders.

In relation to the law (Civic Government Scotland Act 1982) and how these offenders are recommended to be sentenced (SGC, 2003), specific facets about their offending behaviour is important. Distinctions can be made between offenders who have collected, distributed or produced SEMIC, as well as based on factors related to the sexually explicit images and videos involving children they possessed. The size (number of images/videos) and deviancy (sex of the children depicted, age of the children depicted, severity of the content based on the modified COPINE scale) are important factors for both the assessment of risk, as well as for the treatment of these offenders. The more deviant the content and the longer they spent collecting (potentially large size; higher sexual preoccupation), the potentially higher risk they pose to reoffend (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005) and the more focused treatment they need (Hudson, 2005). Potentially just as important, is where the images and videos came from, how they were stored (internal/external media; file structure) and whether or not the offenders attempted to hide any images or videos through encryption or password protection. These characteristics might not have direct ties to the risk factors found for contact sex offenders, but they are useful in understanding the intent of the offender, which can help determine what management options are appropriate.

Demographic factors relating to the offenders' age, family and offending history, relationship status, education, employment and whether or not they have access to minor children are also useful when making distinctions between different offenders and what might be important for their assessment and management. Younger offenders with more deviant sexual interests and higher sexual preoccupation are considered to be a greater risk to reoffend and are

potentially more difficult to manage and treat (Hudson, 2005). Similarly offenders with a very antisocial disposition (single, poor mood, hostile attitude) and an instable life (unemployed, lower educated, relationship problems) are also considered to be a higher risk to reoffend (Mann & Beech, 2002). These dynamic risk factors are targeted in treatment as they can be changed. While an offender's attitude toward the crime and the victim (admission of guilt; expression of remorse/empathy) have not been shown to relate to increased risk (Hanson & Morton-Bourgon, 2005, 2009), they have been shown to be important treatment factors (Middleton, 2008).

Evidence from appeals court cases regarding, the restrictions of liberty imposed on internet sex offenders, suggest that practitioners are managing all internet sex offenders in the same way, and very similarly to contact sex offenders who target children. This thesis has questioned whether or not specific details relating to the offender's behaviour, added to details about his social, might make for a better management strategy. This chapter also addressed the potential issues in using risk assessment tools created for, and validated on, contact sex offenders, on a population of offenders that doesn't have any contact offending history.

This thesis will go on to explore what details relating to the offending behaviour and demographic characteristics were reported on by criminal justice social workers and the police in Scotland on a sample of internet sex offenders. More specifically, it will explore how those details or factors might differentiate one internet sex offender from another. This thesis also will explore how those distinctions might overlay with the different levels of risk assigned to each offender by the practitioners as well as how that might have affected their recommendations for management. It is hoped that with empirical data, the decisions related to the assessment of risk and the management of internet sex offenders could be enhanced or better developed, leading to more accurate risk assessment tools/analyses and more targeted management and treatment strategies.

Chapter 3: Methodology

The purpose of this study was to analyse and describe the data routinely collected by Criminal Justice Social Workers and the Police in Scotland on convicted internet sexual offenders and determine how that information might inform decisions about the assessment (level of risk those offenders might pose to reoffend) and management of those offenders (potential treatment decisions; liberty restrictions). To accomplish this, the research first ascertained what information practitioners routinely collected. This was followed by a descriptive analysis of the routinely collected data. Post-hoc analysis of the relationships between the routinely collected factors were explored and used as a framework to assess what information might best inform the risk rating given to those offenders by those practitioners as well as what might be important for their management. A combination of flexible and fixed design utilizing quantitative methods in a real world setting was used to assess both the main and the post-hoc research questions. The reasons for this will be discussed further in greater detail below.

3.1: Research Questions

The main research questions attempted to assess what information police officers and criminal justice social workers routinely collected about internet sex offenders. To accomplish this, a series of sub-research questions were asked.

3.1.1: Police subset

Police reports were examined in relation to:

- What information was routinely recorded in the police data?
- What were the frequencies/distribution within the variables?
- What were the relationships between variables?

- Were there any significant differences between the offenders in this sample?

3.1.2: Criminal justice social work subset

Criminal justice social workers' reports were examined in relation to:

- What information was contained in the social enquiry reports?
- What were the frequencies/distribution within the variables?
- What were the relationships between variables?
- Were there any significant differences between the offenders in this sample?

3.1.3: Post-hoc - What was the relationship between the two sets of variables identified from the reports?

To address this, the following questions were asked:

- Were there any relationships found between the variables identified from the two data sets?
- Were there any significant differences between the offenders in this sample?

3.1.4: How do these results inform practitioners' decisions?

The final research question assessed the applicability of the findings to contemporary theories of risk assessment and management. This was examined in relation to:

- How did the practitioners rate the level of risk of reoffending by offenders?
- What were the practitioners' recommendations for management/punishment and what factors seemed to influence those recommendations?
- How did the results from the study compare with extant research?

3.2: Design

To address the research questions, a "real world" (Robson, 2002) as opposed to "experimental" design was used. Data was collated from practitioner reports used in clinical and legal settings, as opposed to coming from experiments based on manipulated factors in laboratory type setting.

Real world designs may limit our ability to draw conclusions, whereas a true experimental design can establish causation (Miller & Salkind, 2002). For example, with the appropriate experimental design, it could be possible to conclude that having one particular piece of information (e.g. age of the offender) significantly affects how the practitioners rate that offender's level of risk. Because that particular piece of information would have been manipulated, or intentionally withheld from some of the practitioners, while all other information was the same, it would have been possible to conclude that it was that piece of information alone, that affected the results, or in this case, the risk rating assigned to the offender.

Contrarily, in "real world" or observation based research, it is not possible to draw those same conclusions. As there are potentially endless factors that could affect the results, or in the example given above, affect how the practitioners rate the risk levels of the offenders, it is not possible to conclude that one piece of information will or will not affect those risk levels. This is one major disadvantage to real world research.

However, there are advantages that real world research has over experimental research. It is very unlikely that in the real world, a practitioner would be assessing an internet sex offender's likelihood to reoffend in the same controlled environment that would have been found in an experimental design. Because of this, one would have to question the applicability of the results. Other factors that are present in the real world, like tiredness or workload, could affect how a practitioner would rate the level of risk to a particular offender (Zwaan, Thijs, Wagner, van der Wal, & Timmermans, 2009). These factors are unlikely to be mimicked in an experimental design, which is one major disadvantage.

An ideal design would probably take both approaches, experimental and real world, to answering the research questions. One of the approaches (either experimental or real world) most certainly would have been conducted as a follow on to the other, using the information gained as a guide on what to expect. This could have then been followed again by the first design used to reinforce what has been learned from using the second design. In other words, an ideal design would start with real world observations to get a basic understanding and to form some hypotheses about what might actually be affecting the risk ratings. Those hypotheses on which factors affect the risk ratings could then be tested through a manipulation in an experiment. New hypotheses could then be formed and retested through observational real world research.

This ideal design is fairly complicated and would have taken significant time and resources. It would have also required access to a very large sample of internet sex offenders and all their relevant information as well as access to quite a few practitioners. As there were issues with securing such information as well as staff time, as discussed below, it was decided that it was only possible to fully follow through on one of the potential designs. As it was much simpler to gain access to files compiled by the practitioners on a set group of offenders, as opposed to gaining access to practitioners themselves, it was decided that a real world based designed would be done.

While this study utilised mostly a quantitative design, Greene (2007) argues that a mixed methods approach generates the most meaningful and complete answers to complex social phenomena and questions. That is to say, that using a mix of qualitative and quantitative methods gives harmonious answers to the same question or problem. However, that is not to say there are not advantages or disadvantages to using purely a quantitative design over a purely qualitative design and vice versa. Creswell and Maietta (2002) argue that the purpose behind qualitative research is to keep the approach flexible and open-ended and thus allowing the researcher to gain rich and insightful explanations to their research questions. The main advantage to a qualitative design is that it is flexible. Because the research is not constrained by a design

that is fixed or has predefined criteria in advance, it can be flexible or adaptable to change as the research evolves. This also allows for the researcher to be open minded or unbiased about what he or she might find as a result of the research.

The main advantage to a fixed or quantitative design is that there is a straightforward link to theory (Robson, 2002). There are usually hypotheses, which can be tested usually utilising a rigid protocol or framework. This means there is little flexibility in terms of the design as it goes along and really cannot be changed.

Another advantage to fixed or quantitative design, which is often seen as a disadvantage to a flexible or qualitative design deals with the reliability of the research (Shipman, 1981). With a fixed design, it is easy for another researcher to replicate the methods, and in doing so, determine whether or not the same results are found. However, with a totally flexible design, the line of questioning one researcher might take in an interview could be completely different than another researcher, which could result in completely different outcomes as well as totally different conclusions.

This study was conducted in three sequential phases. This first phase assessed what information both the police and criminal justice social workers routinely collected. Following that, the distributions of offenders based on those characteristics were assessed for patterns and relationships, mainly to determine the homogeneity of internet sex offenders. Lastly, the insights gained from the previous two phases were used to inform how practitioners manage and assess the offenders. As the designs varied in terms of fixed or flexible, based on the phases of the research, each of the phases will be discussed in turn.

3.2.1: Phase 1: Routinely collected or reported characteristics

Two main threads can underpin why particular offenders are classified as internet sex offenders and how practitioners define them, their offending behaviour and the demographic characteristics that describe them (see Chapter 2, sections 2.1.4 and 2.1.5). To assess what was routinely reported on about their offending behaviour and their demographics, a partially fixed/partially flexible, quantitative research design was adopted (Robson, 2002).

In relation to forensic assessment and criminal statistics, there are already clearly defined categories or specific details relating to the crime that would normally be collected by the police. As described in Chapter 2, section 2.1.2, the law makes distinctions between those who make sexually explicit media involving children (SEMIC) and those who collect that media ("Civic Government (Scotland) Act," 1982). As a result, this determines some of the information routinely collected. While sections 2.1.3 and 2.1.4 of Chapter 2 discuss some other potential variables relating to offending behaviour of internet sex offenders, some flexibility was granted in the design in terms of exploring other variables that might not be clearly defined by the law. The procedure of how this was done is discussed in section 3.4.

A mostly fixed quantitative design was the methodology used in other studies that looked at crime rates or specifics about a crime being committed, such as the recorded crime statistics in Scotland (Government, 2008) and the crime statistics in England and Wales (Chaplin, Flatley, & Smith, 2011). A similar method design was also used by Seto et al. (2010) and McCarthy (2010) in their studies looking specifically at Internet Sex Offenders.

Similarly, predefined categories exist when describing a group's demographic characteristics. As discussed in section 2.1.5 of Chapter 2, some of the demographic characteristics used to describe internet sex offenders are, age, sex, race, and religion. As with describing the offending behaviour of internet sex offenders, there are already some predefined categories suggesting that a mostly fixed quantitative approach was more appropriate for the design. However, due this study's exploratory nature, some flexibility was granted to cover some demographic characteristics that might have not normally been captured with a purely fixed approach.

3.2.2: Phase 2: Distributions and relationships between characteristics

The purpose of this phase of the study was to assess the distribution of offenders based on the factors routinely collected and reported on by the police and criminal justice social workers, as well as look for relationships between those factors that described the offenders' crime related behaviour and

demographic characteristics. For example, this phase of the study assessed the distribution of the offenders' age when they committed the crime, as well as looked at the potential relationship between the offenders' age and the deviancy of their collections of images and videos. As such, the design was fixed to the factors that were identified in the previous phase. As a quantitative design was chosen, simple descriptive statistics (frequencies, means, medians and standard deviations) were conducted. Exploratory correlational analysis was carried out to examine the relationships between the characteristics used to describe the offenders' demographics and behaviour.

This design has grounding in historical crime theory and research where demographic characteristics are used to explain offending behaviour. Sampson and Lab (1992) used age, sex, occupational attainment, marital attachment and opportunity structures as a way to explain peak and trough trends in the data of specific reported crimes. Seto et al. (2010) also used a similar design on a study looking at Internet Sex Offenders, where details relating to the offender's background and social circumstances where overlapped with details relating to his offending behaviour as a way to explain why the offender might have committed the crime.

While the preferred and chosen design for this phase of the study was a non-experimental fixed quantitative design, it could have been possible to address this portion of the research question using a few different design options. One possibility would have been to use a flexible qualitative design (Robson, 2002). Interviews with offenders could have been conducted and information on the specifics of their crime as well as specifics about themselves collected. This would have then allowed for a direct comparison between offenders using their accounts of how they described themselves and their crimes looking for similarities and patterns. The advantage to this would have been that more detail about the offenders and their crimes would have been gathered and the preconceptions and predefined categories that were used in the chosen design, could have been ignored (Robson, 2002).

However, that design would have removed the practitioners, criminal justice social workers and the police, from the analysis, as the data they

routinely collected would not have been assessed. This would not have directly addressed the main research question. To compensate for that, more interviews would have to have been conducted with practitioners in an attempt to capture what information or factors they felt were most important when assessing and managing internet sex offenders.

The original proposed design of this research had incorporated interviews with practitioners as a validation method for the results, as well as a way to challenge potential differences between the results found and the conceptions held by the practitioners. This added design component was unworkable as it was not possible to gain access to a large enough group of practitioners. The few practitioners that replied to an interview request cited not having enough time as a reason as to why they were unable to participate. While interviews with offenders could have been another data source, as discussed above, this avenue was not fully explored due to anticipated issues regarding gaining access to the offenders. I was unable to gain access to offenders for previous research projects that were similar in nature.

3.2.3: Phase 3: Relationship to risk of reoffending and management

The risk assessment tools (RM2000; Stable/Acute 2007) used in Scotland to assess internet sex offenders' reoffending risk focus largely on demographic characteristics (see Chapter 2, section 2.2.2). The few factors that have been identified in meta-analyses relating to offending behaviour and increased risk for contact sex offenders, deviant sexual interests and high sexual preoccupation, could incorporate all internet sex offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). Similarly, practitioners appear to take a one-size fits all approach to management decisions related to internet sex offenders, also mostly based on social circumstances and demographic characteristics (see Chapter 2, section 2.3). The purpose of the final phase of this study was to assess whether or not the combined sets of data (both the data routinely collected by the police and the criminal justice social workers) incorporating information related to offending behaviour and demographic characteristics might have better utility in informing decisions of risk and

management than only the respective data collected by each group of practitioners alone. This phase was purely exploratory.

3.3: Creating a Sample Population

The sample of subjects used for this study were all offenders who had been convicted of: being in possession of, having distributed or having produced SEMIC, in one police authority region of Scotland. These offenders had been convicted of breaking section 52 of the Civic Government Scotland Act (1982) or the Sexual Offenses Scotland Act (2009).

Demographic and crime related data were originally going to be sourced through ViSOR (Violent and Sexual Offender Registry), a searchable computer database that stores all the information related to current and past sexual offenders in the United Kingdom. ViSOR was originally designed to "facilitate the work of Multi Agency Public Protection Arrangements (MAPPAs) by assisting the cooperative working between the three "Responsible Authorities" (police, probation and prison services) in their joint management of individuals posing risk of serious harm" (NPIA, 2012). The system is a secure space where users (police, probation and prison services) upload and share information about particular offenders across the whole of the United Kingdom. ViSOR was selected as it was thought to contain all the specific information about the offenders and their crimes deemed necessary for this research.

Requests to access ViSOR were made to the then Association of Chief Police Officers in Scotland (ACPOS) as well as to the Scottish Prison Service, the Association of Directors of Social Work (ADSW) and the Scottish Government. All of these agencies were contacted to grant permission to access ViSOR, as at the time, none of these agencies could definitively say they had the ultimate authority to grant access. Initial written correspondence was followed up by phone calls and further by emails. The process took about six months, up to the point where ACPOS granted access to the system for this research project. Around the same time, a two-day course was conducted by ADSW offering training in the use of ViSOR. I attended and this course provided first hand

confirmation that ViSOR was suitable to provide information for this research. While there was not a direct download function, as this was a secure system where information could only be read off a screen, it was possible to search the system for specific criteria or more specifically for those convicted of SEMIC related offenses and then manually enter the required data from the screen into a prepared data collection form.

Further delays were experienced while the application for access was formally processed. I learned that while the people, departments or organizations that originally uploaded the information to ViSOR, technically owned all the information on the system, the system itself was owned and maintained by the National Policing Improvement Agency (NPIA). This was (closed down in 2012) a governmental body set-up to improve the policing standards in the UK, but run and managed by governments in England and Wales. This study was the first time there was a request to access ViSOR for research purposes and there was a lack of clarity as to who could grant access to the information. As the system also incorporated information held on offenders outside Scotland, it was decided that for ethical reasons, access was not possible. This essentially meant that ViSOR was no longer a viable option as an information source.

However, the training courses and the time spent learning to use ViSOR provided an insight into what information was collected by the police and criminal justice social workers, in Scotland, on this group of offenders and uploaded onto the system. This helped with establishing a framework of what information might be available in the records and could be incorporated into this study.

3.3.1: Police subset

The forensic units of the each of the existing Scottish police forces were responsible for analysing and assessing the hardware of a suspected offender to determine whether or not a crime was committed. The reports that these units produced for the procurator fiscal (forensic reports) were deemed to be suitable for the purpose of this research question.

Forensic Reports

These are reports written by specially trained police officers as a legal document used by the procurator fiscal to bring charges against someone for breaking the law using technological hardware, such as computers, mobile phones and other storage devices. The reports contain very detailed information about what was found on the suspect's hardware and potentially where it was from. The reports that were used in this study came from one police force. These reports seemed to evolve with time in terms how much information was reported in them and how that information was organised and presented. However, all reports contained the following information:

- Name of offender
- Date of birth of offender
- Date report was written
- Date the hardware was seized from the offender
- What hardware was seized (make, model, serial number, size, type)
- Date(s) the analysis on the hardware was conducted
- Overview of what was found on each specific piece of hardware (number of files both live and deleted*)

  **Deleted images/videos were files that the offenders attempted to remove from their computer, but were forensically recovered*

- Number of illegal images found (live and deleted *) broken down by modified COPINE rating
- Number of illegal video files found (live and deleted*) broken down by modified COPINE rating
- Description of the content of a sample of the images and videos
- Description of the overall age range of the victims in the images and videos
- Description of the sex of the victims in the images and videos

- Where specifically the media (images and video) were sourced -- described specifically for the sample chosen, summary given for everything else (specific web address, or P2P user)
- How the files/media were stored — (e.g. folders on hard drive, encrypted, hidden in other folders etc.)
- When the files were created
- When the files were last modified
- When the files were last looked at
- What the internet browsing history looked like
- When files were last deleted
- If a P2P program was used and who the suspect/offender traded, shared, or downloaded from

Eighty forensic reports from one Scottish Police force were examined to create this sample. This represented all of the offenders in that particular Scottish region from 2002 until 2009 that were convicted up until the point of data collection. The forensic reports on suspects who were accused, but either not yet convicted, or found not guilty, were not made available by the police. All eighty offenders were male and between the ages of 17 and 66 when the alleged crime was committed.

At the time of data collection, there were eight different police forces in Scotland, each with their own personnel and specially trained forensic officers. This meant that each of the different forces was producing their own reports and there was not a standardized report format. This meant that the other seven police forces in Scotland could have been producing forensic reports with different information. While this is not a particular problem for this study, as a sample was created from one force, replication could be an issue in the future.

The validity of the reports was another potential issue. At the time of data collection, the senior officer in charge made it very clear that his force and his team analysed every single piece of digital evidence found within the hardware. He was insistent that they looked at, logged and rated every illegal

image or video making a note of the age and sex of the child victim depicted, as well as the seriousness level of the image on the modified COPINE scale (Taylor et al., 2001). His argument was that it was the professional and legal standard required by the procurator fiscal. In terms of this study, this was taken as fact. However, in terms of practicality (as discussed Chapter 2, section 2.2.1), this would have become increasingly more time consuming, potentially taking months per case. Some offenders had over 100,000 media files and the time required to assess each of those would be inconceivable. It could be possible that the police were taking a random sample of the images and rating them. This could mean that some of the outliers in an offender's collection might have been inadvertently ignored or that the quantities of images or videos categorised into the different modified COPINE levels, might have been estimated based on a sampling technique instead of an accurate representation.

3.3.2: Criminal justice social work subset

Each of the local authorities in Scotland provides the relevant social work services to their constituents, offenders included. A report that investigated the offenders' character, physical and mental condition, as well as an assessment of risk, and discussion as to which disposals are appropriate, was produced by criminal justice social workers and provided to courts prior to sentencing (Government, 2004). These reports, called Social Enquiry Reports (SER's) (now called Criminal Justice Social Work Reports) were identified after the ViSOR training, as a source that provided the type of information needed for this research.

Social Enquiry Report

These are reports written and produced by trained generic criminal justice social workers, as a legal requirement, to aide in the sentencing of an offender by the courts. These reports are partly standardized, as there is a national framework, however there is some flexibility in terms of what the author feels necessary to report (Government, 2004). A template of a report can be seen in Appendix C, but generally the following information is included:

- Date the report was produced
- Name of the report authors
- Dates of interviews and lists of what information was used for the report
- Name(s) of the offender
- Sex of the offender
- Offender's date of birth
- Occupation of the offender
- Address of the offender
- Whether or not there are any outstanding charges against the offender
- Description of the current crime/what the offender was charged and convicted of
- Criminal history
- Family history of the offender
- Where the offender was born
- Educational history of the offender
- Employment history of the offender
- Habitation history of the offender
- Relationship history of the offender
- Current and past financial situation
- Health history of the offender
- Whether or not the offender has any substance abuse issues
- What the offender's attitude was towards the current offense--did he admit guilt? Was he remorseful?
- Analysis of the offending behaviour
- Assessment of the offender's risk to reoffend
- Assessment of the relevant disposals
- Other relevant remarks and conclusions

The Social Enquiry Reports (SER's) of 30 males convicted of breaches of section 52/52A of the Civic Government Scotland Act, between the ages of 20 and 66 when the crime was committed, were examined. These reported on the same sample of offenders from the police forensic reports and were compiled by three different local authorities that fell within the jurisdiction of that Scottish Police force. The 30 reports were matched to the offenders from the police sample by a unique code created specifically for this research by the police. While there ideally should have been 80 social enquiry reports that matched up to the forensic reports, the remaining 50 were unable to be located by the criminal justice social workers providing the reports. This was likely the result of a miscommunication between the criminal justice social workers and the police who had requested the SERs on my behalf. The information the police used to identify the offenders (offender id numbers) likely did not match up with how the criminal justice social workers categorically stored their files. I suspect it would have taken more staff time than the criminal justice social workers or the police were willing to commit to locate the other 50 files. As there was no discernible pattern to the missing reports from the police data, there was no reason to suspect there were any systematic differences between the available and missing SERs.

There were some potential issues in using the SER's as a data source for this research. As there was no specific training for the criminal justice social workers who authored these reports and there were many different authors for SER's, the standard and quality of these reports varies greatly not only amongst local authorities in Scotland, but also within departments and amongst authors. This problem has been evidenced in numerous studies and governmental reports (Tata, Halliday, Hutton, & McNeill, 2007; Whyte, Ramsay, Clark, & Waterhouse, 1995). As a consequence, some of the reports used in this study provided substantially more in-depth information than others. However, very few did not provide enough information to fill in all of the data collection form. It should also be noted that all the information provided was treated as official accounts, as these reports were technically legal documents submitted to the courts. The Scottish Government has since addressed these issues and the

framework of what information should be included was updated and changed in 2010 (The Scottish Government, 2010). However, all the reports used in this study were produced prior to the implementation of the new standards.

While there were other reports and files that could have been useful for creating a sample (clinical notes, intelligence reports), the two above reports were deemed the best fit for what was needed for this study. It was also thought that it would be easier to gain access to the police forensic reports and SERs, as they are documents produced and used in court and in the public realm, whereas clinical notes and intelligence reports are not and could be more privileged or protected.

3.4: Procedure

As mentioned above, while ViSOR was not available, the training courses that were attended, and which explained how to use the system, provided a useful reference by offering some fixed categories or characteristics used to describe the offenders that the police and criminal justice social workers should have used. This provided an insight into what information to request access to and allowed for data collection sheets to be created in advance.

3.4.1: Police subset

A medium sized Scottish police force was contacted and asked to provide access to the forensic reports conducted on the computer/electronics equipment on all the offenders that were convicted for violations of section 52/52A of the Civic Government Scotland Act (1982) or the Sexual Offenses Scotland Act (2009). This police force was chosen because the chief constable at the time was also the acting head of ACPOS. He had already "attempted" to grant access to ViSOR and a relationship in regards to this research had already been established. I submitted the required ethical review paperwork to the institutional review board of that police force. Access was granted and the head of the forensic science unit complied the forensic police reports from all eighty

of the offenders convicted of internet sexual offending from 2002 until 2009 in that particular Scottish police force region.

The original reports were completed by the forensic science unit at the head office of this Scottish police force. My access to the reports was restricted and they could not be removed from the police building. In the first instance, the reports were read, a list of routinely collected data was identified and this informed the further development of a data capture tool. The reports were then re-examined and a data sheet completed for each of the 80 reports. Following the visits to the police, the data was then transferred from the data capture tool into SPSS and coded into nominal information.

Data Coding of the Police subset

A search of earlier research papers did not identify any published data collection tools. Table 3.4.1 shows the information taken and the way in which it was coded.

Table 3.4.1: Data from the police

Factor	Type of Variable	Coding	Explanation
Year of birth	Nominal		
Year of crime	Nominal		
Age when crime was committed	Ordinal		
Type of media	Categorical	Internal storage medium; external storage medium; both	The forensic reports listed specifics about where and how the media was stored. For example, if it was found on an internal hard drive or on an external cd. If the storage medium was something that could be removed from the computer and carried or transported, this was coded as external storage medium. If the media was only stored on an internal hard drive, this was coded as internal storage medium. If the offender's collection was stored on mixture of internal and external storage, this was coded as both.
Where the media was from	Categorical	Unknown; Websites; Peer2Peer: Multiple	While some of the forensic reports contained more detailed information about where the media came from, it could be generally broken down into the categories listed above. If all the media came from Peer 2 Peer networks (like Kazaa) this was coded as peer 2 peer and similarly if all of the media came from websites, this was coded as websites. However, if some of the media came from Peer 2 Peer and some of the media came from websites, this was coded as multiple sources.
Was the offender distributing	Categorical	Yes; No	
Was the offender producing	Categorical	Yes; No	
Did the offender attempt to hide images	Categorical	Yes; No	If the offender used encryption tools, passwords or a complicated file structure this was coded as a yes. If the offender physically hid the media storage device, like in a wall or toilet, this was also coded a yes. If the media was not hidden and easily found on the drive or disk, this was coded as a no.
Sex of the children depicted	Categorical	Male only; Female only; Both	The forensic reports mentioned overall whether or not the offender's collection depicted child victims that were male, female or both. This was coded over accordingly. It should be mentioned that this was not an image by image breakdown, but rather a whole collection breakdown. This means that if the entire collection was females, apart from one image, this was coded as both male and female depicted.
Age of the child depicted	Categorical	Less than 3; Pre-pubescent (4-9) Early Puberty (10-13); Late Puberty (14-17)	The forensic reports broke the child victims into age ranges. If the offender was in possession of media where a child victim fell into one the age categories above, he was coded as being in possession of media depicting children of that age category. Each offender could be coded as having media from more than one age category depending on what they were in possession of.
Age of the youngest child depicted	Ordinal		
Age of the oldest child depicted	Ordinal		
Number of images and videos collected and what level	Scale/Nominal		On the forensic reports, the offender's collections were broken down by what level of the modified COPINE scale they were and the number of images and or videos that fell within that ranking. These were transferred and coded over accordingly.

3.4.2: Criminal justice social work subset:

The three local authorities that fell within the medium sized Scottish police force, that were used to capture participants for the police sample, were contacted and asked to provide the Social Enquiry Reports for the corresponding offenders in their local authorities. As the information collected was anonymized, this request was done with the aide of the police force by providing unique code numbers that matched the forensic reports already collected. Each of the local authorities had their own institutional review boards. I completed the required ethical review paperwork for each and submitted it. Access was then granted by each of the three local authorities.

A data collection tool was developed in advance utilising the knowledge gained from the ViSOR training course as well as the template SER's provided by the Scottish Government (see Appendix C) and the data found in previous studies looking at a similar sample of offenders (Buschman, Wilcox, Krapohl, Oelrich, & Hackett, 2010; Seto et al., 2010).

Hard copies of the social enquiry reports from one of the local authorities were viewed over the course of one day. Initially, all the reports were read to assess the suitability of the data collection tool. Following this, the data collection sheets were populated and the data transferred into an excel file.

Two other local authorities provided digital anonymized copies of the reports. A similar procedure was followed, first assessing the suitability of the data capture tool, followed by a data capture and finally transferring the extracted data into a spreadsheet. Once all the data was collected from the criminal justice social workers, the data was then transferred into SPSS and coded into nominal and categorical information.

Data Coding of the Criminal Justice Social Work Sample

There have been a number of studies that have examined the demographic characteristics of sex offenders (Buschman et al., 2010; Seto et al., 2010) that provided some examples of coding practices (see Chapter 2, section 2.1.5). However, and as mentioned in section 3.2, the design of this study was

also part exploratory. The categories of information collected and how they were coded can be seen in Table 3.4.2.

Table 3.4.2: Data collected from criminal justice social work

Factor	Type of Variable	Coding	Explanation
Family History	Categorical	Two parent home; Single parent home; Abusive home	This was not clearly laid out in the SER, however family history was mentioned. If there was mention of abuse, this was coded as an abusive home. If there was a mention of divorce during the upbringing of the offender, but no abuse, then this was coded as single parent home. If neither abuse nor divorce was mentioned, but family was talked about, it was coded as two-parent home.
Marital Status	Categorical	Single; Divorced; Married; Co-Habiting	
Current Sexual Partner	Categorical	Yes; No	While it was not specifically mentioned in the SER on whether or not the offender was currently involved in an appropriated aged sexual relationship at the time, there was information about the offender's current living situation. If there was mention of the offender living with a girlfriend or spouse, this was coded as yes. If the offender was either living alone or was divorced this was coded as no.
Children Under the Age of 18	Categorical	Yes; No	
Access to Children	Categorical	Yes; No	This was not a specific category on the SER. If the offender had minor children, there was mention of minor grandchildren or there was any other mention of being involved with children (coach, teacher, etc.) this was coded as a yes. All other circumstances were coded as a no.
Housing	Categorical	Renting Private Accommodation; Owned Own Home; Living with Family; Council Housing; Homeless	
Highest Level of Education	Ordinal	School; College; University	
Week Income	Nominal		
Socio-Economic Status	Ordinal	Non-working Class; Working Class; Skilled Working Class; Lower Middle Class; Middle Class; Upper Middle Class	This factor was not clearly listed in the SER, however employment history and job skill level were. These were then used to rate the offender on the NRS social grade scales that then ties into social economic status. If the offender was historically never employed or permanently on the welfare system, they were coded as non-working class. If the offender was employed in semi or unskilled labour, he was coded as working class. If the offender was employed or trained as a skilled manual labourer, he was coded as skilled working class. If the offender was employed in a supervisory or clerical role, he was coded as lower middle class. If the offender was an intermediate level manager or administrator or was a professional, he was coded as middle class. If the offender was upper level management, an upper level administrator, or a highly skilled professional, he was coded as upper middle class. While the rating scale itself did not have an upper class, if the offender was independently wealthy and there was mention of him being a socialite in the SER, he would have been coded as upper class.
Admission of Guilt	Categorical	Yes; No	
Declared Sexual Interest in Children	Categorical	Yes; No	
Showed Signs of Remorse	Categorical	Yes; No	
RM 2000 Score	Nominal/Ordinal		This was given as a score as well as a corresponding, low risk, medium risk or high risk
Stable/Acute 2007 Score	Nominal/Ordinal		This was given as a score as well as a corresponding, low risk, medium risk or high risk

3.4.3: Data Analysis

Descriptive Statistics

The distributions of the samples were examined for descriptive statistics including the frequencies, means, standard deviations, and medians; a method used in similar studies (Neutze, Seto, Schaefer, Mundt, & Beier, 2011; Seto, 2009; Seto & Eke, 2005; Seto et al., 2011; Seto et al., 2010). This also allowed for direct comparisons to other samples of internet sex offenders, for example a comparison with Seto et al. (2010).

Normality

To determine what types of statistical tests could be used to compare different factors within the samples, the continuous data was tested for normality. This was needed as many statistical tests make the assumption that the data being analysed is classified as having a normal distribution (Robson 2002). If the sample did not fit a normal distribution, either different statistical tests (non-parametric) need to be used, or the data needed to be transformed using different statistical methods to make the data "fit" a standard normal distribution.

To test for normality, the Shapiro-Wilk test was used and interpreted using a Q-Q plot (Robson 2002). According to Shapiro, Wilk, and Chen (1968), this test provides superior robustness in calculating non-normality over other available tests.

Correlations

As a large part of this research was looking for relationships between multiple factors or variables, statistical correlational tests were conducted on different combinations of variables. For the variables that were continuous and were found to fit a normal curve, Pearson's chi-squared test (Pearson, 1900), would have been used to test for correlations between variables. However, this particular test makes an assumption that there will be a large sample size, as well as large cell sizes. In the case of this study, this was not true. An alternative

test that allows for a smaller sample size and small cell sizes was the Fisher's exact test (Fisher, 1922). The limitations to this test are that it assumes normality and only works for a 2x2 design. This test was used in this study, when those two criteria were met.

For non-parametric data that also had small cell and sample sizes, the Kendall's tau test was used. In the case of a 2x2 design, the Kendall's tau-b (Kendall, 1938) statistic was calculated and in the case the design was greater than a 2x2, such as a 2x3, the Kendall's tau-c (Kendall, 1938) statistic was calculated.

The effect sizes, as well as the statistical significance of each of the correlational tests conducted, can be found in the correlation tables in the results chapter. While there is some debate as to what qualifies as a small, medium and large effect for Kendall's tau (Trusty, Thompson, & Petrocelli, 2004), Cohen's (1992) scale of .1 for small effect, .3 for medium effect and .5 for large effect generally applies (Gilpin, 1993).

Mean Comparisons

As this research was also exploring how these offenders might be different to one another, the differences between means of some continuous variables (such as the offender's age; the number of images and videos the offender possessed and the age of the youngest/oldest child in his collection of images and videos) were compared using other exploratory factors (such as the deviancy of his collection or whether or not he produced or distributed SEMIC). In the circumstances where the continuous data was also found to have a normal distribution, T-test's were performed (Robson, 2002). In the situations where the continuous data did not follow a normal distribution, the Wilcoxon signed-rank test (Wilcoxon, 1945), a non-parametric test, was used.

Significance Levels

As standard in social science and psychology research, an alpha level of 5% was chosen. According to Sirkin (2006) this level is typically used "because of custom and tradition" where an alpha level of 5% "represents a compromise between the risk of falsely rejecting a true null hypothesis and the risk of falsely

retaining an untrue null hypothesis". The p-values, when found significant, were reported for each statistical test run.

Other Statistical Tests

Both factor analysis and latent class analysis were considered as possible statistical tests that could have been utilized as a way to further the classification of internet sex offenders. However, both were ultimately ruled out at this stage of the research. It was decided that factor analysis would not have been appropriate, as the theory underpinning potential unobserved variables is still rather new and being debated. Similarly, given that recidivism rates of these internet sex offenders were not recorded, the practical usefulness of which factors might contribute to an increased likelihood to recidivate would have been difficult to measure.

Latent class analysis might have also been useful in understanding potential latent classes of internet sex offenders. However, due to the relatively small sample size, specifically in some of the offender demographic characteristics, it was determined that utilizing latent class analysis might not have given the most accurate representations of the overall sample of internet sex offenders.

Both of these statistical tests are being considered for follow on research, assuming both the recidivism data and a larger sample can be obtained.

3.5: Ethical Considerations

As Internet sex offenders are a vulnerable group and the crimes that they committed are a very sensitive topic, many ethical considerations played a significant role in the design and methodology of this study. The use of case files and reports (specifically the police forensic reports and SERs) was chosen as a data source instead of interviews for several reasons. Gaining access to offenders to conduct interviews for research purposes would have involved a lengthy institutional review process for both the Scottish Prison Service and the University of Edinburgh. Conducting interviews would have also required gaining informed consent from each offender interviewed as well as making it

explicitly clear that none of the information gained from the research could be used to either help or to punish the offender. Conversely, these were less of an issue when conducting a case file review. The institution review process, as described below for the University of Edinburgh, was not as intensive when human subjects were not used and because access was not needed to offenders, the Scottish Prison Service was not involved. Also because the files chosen, the police forensics reports and the SERs, are documents used in court and on public record, it was deemed not necessary to gain informed consent from the offenders. This is because the use of the information from the reports would have no direct effect on the offenders or their sentences.

There was also a concern with being exposed to graphically disturbing material as a researcher. After having discussions with other academics who research sensitive topics, it was determined that there would be more control over the amount of graphic material I was exposed to by conducting a case file review as opposed to interviewing the offenders. With the case file review, I could limit the amount of time I spent collecting the data, adjusting when necessary. Conversely, if interviews were to be conducted, some offender descriptions could be more vivid and it would have been harder to control for. A support network was put in place as a way for venting the thoughts and ideas surrounding what I saw and witnessed with the case files.

There also was a concern with interviewing offenders about their behaviours relating specifically to their collection, distribution and/or production of SEMIC and how that might affect them. In a sex offender treatment programme, I observed sex offenders obtaining sexual gratification or pleasure from reliving or describing the specific details of their crimes. I also observed offenders getting extremely depressed and suicidal when talking about the specifics of their crimes. It would have been difficult to provide the support needed to the offenders interviewed if something similar happened. These were not issues when using the case files as a data source.

Ethical approval at the University of Edinburgh

The School of Social and Political Studies at the University of Edinburgh used a multi-level institution review process. The first level was a self-check that determined whether or not a review panel was needed. This research did not involve contact with any human subjects, however it was dealing with a sensitive topic so it was self-rated a level one (no-review panel needed), but was sent to the institutional review board for approval anyways (level-2). Several issues were covered in the application for approval. Because personal data of a very sensitive nature was being used, it was planned that all information extracted from original reports would anonymized and all copies of reports that were provided would have all identifiable information redacted. The collected raw data was also encrypted and access to it was limited. The institutional review board accepted the proposed research suggesting only that I limit my exposure to the graphically disturbing material as much as possible.

Ethical approval from the police force and criminal justice social work

As already mentioned, the Scottish police force and the three local authorities within in it had their own institutional review boards. Each required its own paper application requiring a detailed proposal. These were all submitted and ultimately approved.

Chapter 4: Results

As discussed in Chapter 2, practitioners, largely criminal justice social workers, have a legal responsibility for the assessment of risk and the practical management of internet sex offenders in Scotland. Similarly, the police have a legal duty to determine whether or not a crime has been committed. This leads to both the police and criminal justice social workers having to make distinctions between different offenders to not only determine what level of crime has been committed but also how large the risk that these offenders might reoffend and what management strategies could be used to mitigate those risks.

Offending behaviour characteristics of internet sex offenders, both in terms of the law (Civic Government Scotland Act 1982) and the level of risk that they might reoffend, suggest that not all internet sex offenders are the same. Distinctions between the characteristics that describe their offending behaviour, such as the size and deviancy of their collections of SEMIC, how and where they stored the images and videos, and where the SEMIC came from could be important in determining the level of risk of an offender reoffending and what type of management and treatment would be most appropriate (see Chapter 2). Similarly, as also discussed in Chapter 2, demographic characteristics, and the offender's attitudes and beliefs toward the crime and the victims, are also important in determining the risk an offender reoffending, and what management and treatment options are most suitable.

The main aim of this thesis was to determine what information criminal justice social workers and the police in Scotland were routinely collecting on internet sex offenders, and to determine how that information might inform any risk assessment and management decisions made. This was accomplished by assessing the routinely collected information for any distinctions that could be made between different internet sex offenders and referenced within the context of the extensive literature relating to what factors increase the

likelihood contact sex offenders who target children will recidivate.

This chapter is broken into three parts. The results are discussed in relation to the two subsets (the data gathered from the police forensic reports and the data gathered from the criminal justice social work reports) first. The descriptive statistics for each of the subsets are first analysed in relation to each of the different characteristics routinely collected by either the police or criminal justice social workers. This analysis depicts which characteristics were utilized by both the police and the criminal justice social workers when making distinctions between different internet sex offenders, and how this particular sample of offenders was distributed based on those characteristics. Exploratory correlational analysis of the relationships between several of the characteristics within the subsets is also reported on as a way to further conceptualize this sample of internet sex offenders within the context of the characteristics known to increase recidivism risk in contact offenders who target children.

The last section was a post-hoc analysis assessing how the combined sub-sets might enhance or mitigate the distinctions between internet sex offenders in terms of the risk of recidivism and potential management issues. This was accomplished by analysing the relationships between several of the characteristics that described offending behaviour of the offenders with several of the characteristics that described their demographics and the attitudes held about the crime. Comparisons were also made between the risk rating assigned to the offenders and any management recommendations made by the practitioners with the routinely collected characteristics that describe what they did or who they are.

4.1: The Police Subset

The total number of internet sex offenders assessed in this subset was 80. However, not all of the characteristics were reported on in every record and this is reflected in the analysis. The police mainly collected information relating to the offending behaviour of the offenders and any distinctions made were based on those characteristics. This included where the SEMIC was from and

where it was stored, whether or not the offenders also distributed or produced SEMIC, whether or not the offenders had a previous history of sexual offences, the number of illegal images and videos the offenders possessed, the age and sex of the children depicted in the images and videos, how extreme the content was based on the modified COPINE scale, and whether or not the offenders attempted to hide any images or videos through encryption or other means.

4.1.1: Descriptive Statistics

The distribution of the offenders based on the characteristics found in the police forensic reports can be seen in Table 4.1.1. The distribution of offenders based on these characteristics is discussed further below.

Year when the crime was committed

Just over 40% of the crimes were committed in 2002 and 2009, the first and last years of the data collection time frame. The years in-between appeared to be fairly even in frequency with an average of just under 8 offenses per year.

Where the SEMIC was from and where it was stored

The distributions show there was a large majority (68.8%) of offenders who obtained their SEMIC from websites, with a small percentage having utilized peer 2 peer networks (8.8%).

The majority (56%) of the offenders stored their collections of sexually explicit media involving children (SEMIC) on both internal hard drives and external storage media. There was however a small percentage of offenders that only stored their collections of SEMIC purely on external storage devices (10%).

Distributors and Producers

Only 12.5% of the offenders were classified as producers and less than a quarter were classified as distributors. This demonstrates that the majority of the offenders in this sample had only possessed SEMIC.

Offending History

None of the offenders had previous convictions for contact sexual offending and 2.5% of the offenders had previous convictions for internet sexual offending.

Size of the offenders' collections

The mean number of images in the offenders' collections was 6367 (n=80; SD= 23,674) and the median was 308 (n=80). The mean number of videos was 45 (n=80; SD=168). When combined (images and videos), the mean number of SEMIC was 6,413 (n=80; SD=23,677) and the median was 309 (n=80). As seen in Table 4.1.2, the majority of offenders were in possession of less than 100 images, videos or both. For each of the three categories (images, videos, both) the number of offenders appeared to decrease as the size of the collections went up. This was much more pronounced for the videos than the images.

The assumption of normality for the overall distribution of media (images and videos) of the offenders' collections of SEMIC was tested with the Shapiro-Wilk method and the results (SW=.270, df=80, $p<0.001$) as well as the skewness (7.20) and kurtosis (58.1) showed that normality was not the correct assumption. Similarly, images alone (SW=.280, df=80, $p<0.001$; skewness=7.22, kurtosis=54.2) and videos alone (SW=.294, df=80, $p<0.001$; skewness=4.884, kurtosis=25.12) also did not have a normal distribution.

Sex of the children depicted

In this sample, 40% of the offenders were in possession of SEMIC in which both male and female children were depicted, and approximately one third were in possession of SEMIC which depicted only female children, as seen in Table 4.1.3. This is in contrast to the 12% of the offenders being in possession of SEMIC that depicted only male children.

Table 4.1.1: Frequencies taken from the police sample related to the crime

	Number of offenders (N=80)
Offender age when crime committed	
Under 20	3 (4%)
20's	17 (21%)
30's	15 (19%)
40's	17 (21%)
50's	10 (12.5%)
60 or Over	2 (2.5%)
Year crime was committed	
2002	17 (21%)
2003	13 (16%)
2004	8 (10%)
2005	4 (5%)
2006	6 (7.5%)
2007	6 (7.5%)
2008	9 (11%)
2009	16 (20%)
Where the SEMIC was from	
Websites	55 (68.8%)
Peer 2 Peer Networks	7 (8.8%)
Multiple sources	16 (20%)
Where SEMIC was stored	
Only on internal hard drive	24 (34%)
Only on external storage device	7 (10%)
Both internal and external storage device	39 (56%)
Offending behaviour	
Possessed (collected) SEMIC	80 (100%)
Produced SEMIC	10 (12.5%)
Distributed SEMIC	19 (24%)
Attempted to hide SEMIC	25 (31%)
Previous contact sexual offences	0
Previous internet sexual offence	2 (2.5%)

Table 4.1.2: Frequencies taken from the police sample related to the size of offenders' collection of SEMIC

	Number of Offenders (N=80)		
	Images	**Videos**	**Media (both)**
Less than 100	33 (41%)	26 (87%)	31 (39%)
Between 101 and 1,000	17 (21%)	3 (10%)	19 (24%)
Between 1001 and 10,000	17 (21%)	1 (3%)	17 (21%)
More than 10,000	13 (16%)	0	13 (16%)

Table 4.1.3: Frequencies taken from the police sample related to the content of offenders' collection of SEMIC

	Number of offenders (N=80)
Sex of children depicted in SEMIC	
Only male	10 (12%)
Only female	27 (34%)
Both male and female	35 (40%)
Age of Children depicted in SEMIC	
Under the age of 3	10 (12.5%)
Pre-pubescent (4-9 years old)	43 (53.8%)
Pubescent (10-13 years old)	66 (82.5%)
Late puberty (14-17 years old)	60 (75%)
Age of the youngest child depicted in the collection	
Under the age of 3	10 (12.5%)
Pre-pubescent (4-9 years old)	33 (41%)
Pubescent (10-13 years old)	23 (29%)
Late puberty (14-17 years old)	4 (5%)
Age of the oldest child depicted in the collection	
Under the age of 3	0
Pre-pubescent (4-9 years old)	0
Pubescent (10-13 years old)	10 (14%)
Late puberty (14-17 years old)	60 (86%)
Level of SEMIC possessed*	
Level 1	57 (71%)
Level 2	29 (36%)
Level 3	26 (35.5%)
Level 4	33 (41%)
Level 5	12 (15%)
Highest level of SEMIC possessed *	
Level 1	22 (28%)
Level 2	10 (13%)
Level 3	9 (11%)
Level 4	25 (32%)
Level 5	13 (16%)
Level of largest proportion of SEMIC possessed *	
Level 1	52 (65%)
Level 2	10 (13%)
Level 3	6 (8%)
Level 4	10 (13%)
Level 5	1 (1%)

*** Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Age of the children depicted

Almost all of the offenders were in possession of SEMIC which depicted pubescent children (aged 10-13 years old) and three quarters of the offenders had an image or video in their collection depicting a late pubescent child (aged 14-17 years old), as seen in Table 4.1.3. Just over half of the offenders in the sample were in possession of SEMIC that depicted pre-pubescent children and a very small amount of offenders possessed SEMIC depicting children under the age of three.

The mean age of the children depicted in the SEMIC was seven and the median was eight years old (n=70) when the collections were assessed for the age of youngest child victim depicted. The assumption of normality was tested with the S-W method; the results (SW=.967, df=70, p>0.05) as well as the skewness (0.001) and the kurtosis (-.513) showed that normality was the correct assumption. As seen in Table 4.1.3, when looking at age of the youngest child depicted in either a video or image in the offenders' collections, the majority, at just under half, were in possession of SEMIC that depicted pre-pubescent children (aged 4-9). Just under a third were in possession of SEMIC where the youngest child depicted was pubescent (10-13) and just over a tenth possessed an image or video where the child depicted was younger than the age of three. Only a few offenders possessed SEMIC where the youngest child was in the late stages of puberty meaning the youngest person depicted in their collection of images and videos was 14.

When the age of the oldest child depicted in an offender's collection of SEMIC was assessed, the mean and median age were both 15 (n=70). As seen in Table 4.1.3, there were no offenders in which the oldest child depicted was under the age of 9, or younger than pubertal and the vast majority (86%) were in possession of an image or video where the oldest child was in the later stages of puberty (aged 14-17).

Modified COPINE rating level

As seen in Table 4.1.3, almost three quarters of the offenders were in possession of SEMIC that was rated level 1 (least serious) on the modified

COPINE scale, and almost half were in possession of an image or video that was rated level 4. About a third were in possession of a level 2 or level 3 image or video and only 15% of offenders were in possession of level 5 image or video.

When just the highest rated image or video in an offender's collection of SEMIC was assessed, the largest number of offenders possessed a level 4 image or video (32%) or possessed only a level 1 image or video (28%), as seen in Table 4.1.2. The other three levels (2, 3 and 5) had similar concentrations of offenders (between 11% and 16%). The assumption of normality for the distribution of offenders based on their highest rated image or video was tested with the S-W method and the results (SW=.863, df=80, $p<0.001$) as well as the skewness (-0.156) and kurtosis (-1.455) showed that normality was also not the correct assumption in this case.

Fifty-two (65%) of the offenders had the largest proportion of level 1 images and videos. As seen in Table 4.1.3, that proportionality then drops to between 8 and 10% for those offenders who were mostly in possession of images and videos rated at levels 2, 3 and 4 and then drops further with only one offender (1%) who was in possession of mostly level 5 SEMIC.

4.1.2: Correlations and cross tabulations between behavioural characteristics

One of the aims of this thesis was to provide insight into potential differences between internet sex offenders and how that might inform or affect how practitioners assess their reoffending risk and what management options practitioners find most suitable to mitigate those risks. As it is not yet known which characteristics are most important in assessing the risk internet sex offenders pose in terms of recidivism, comparisons to known factors increasing the recidivism risk for contact sex offenders who target children have been made. As not all of these factors are completely salient with internet sex offenders (for example, having committed a non-contact sexual offence or not knowing his victims), correlational analysis was used to assess for any potential additive or deductive relationships between several of the characteristics exclusive to internet sex offenders and those that likely relate to both internet

and contact offenders who target children. This section reports on the relationships found, or not found, between the characteristics that describe their offending behaviour, which is detailed further below and in Table 4.1.4.

SEMIC level in relation to age and sex of the children depicted

Several significant correlations were found between the three measures of deviancy (age and sex of the children depicted and severity level based on the modified COPINE scale) of an offender's collection of SEMIC. These correlations suggest a potential additive effect between the characteristics used to describe the deviancy of an offender's collection. These relationships show that offenders who possessed the most deviant material in one category likely also possessed material that is considered to be most deviant in another. The individual correlations are discussed in greater detail below. These correlations are an important finding specifically in relation to the assessment of risk utilizing current tools and how these internet offender specific deviancy measures overlay with known risk factors for contact sex offenders who target children. The implications of this finding will be discussed in greater detail in the next chapter.

The police reports divided an offender's collection of SEMIC into images and videos based on quantities and how they were rated based on the modified COPINE scale (see Chapter 2, section 2.1.3 and section 2.2.1). When assessing only the images in the offenders' collections, a statistically significant difference was found between the highest level of image (most deviant) and the age bands of the youngest child depicted in an offender's collection (Kendall's tau-c = -0.400, N=70, $p<0.001$). The negative correlation showed that as the severity of the image content got more deviant the age band of the children depicted got younger (also more deviant). A similar significant correlation was also found when comparing the highest rated media (both images and videos combined) and the age band of the youngest child depicted (Kendall's tau-c = -0.342, N=70, $p<0.001$). This correlation also shows that as the severity of the content in the image or video got more deviant, the age band of the youngest child depicted got younger. A correlation was not found when assessing only the videos in an

offender's collection for the highest rated when compared with the age band of the youngest child depicted (Kendall's tau-c = -.188, N=70, p>0.05). The distributions of these variables can be seen in Table 4.1.5.

The same relationship, a significant correlation (Kendall's tau-c = -.391, N=70, p<0.001), was also found when the age of the youngest child victim depicted was treated as a continuous variable instead of age bands. As found with the age bands, this correlation showed that as the age of the child victims got younger, the severity of the media on the modified COPINE scale got higher. The same correlational effect was also found when only looking at images as opposed to images and videos combined (media) (Kendall's tau-c = -4.16, N=70, p<0.001). There was also a significant main effect between the different levels on the modified COPINE scale for images examined according to the highest rated image in an offender's collection when looking at the average age for the youngest child victim depicted in each group F(4,62)=5.626, p<0.0. This main effect was also found based on different levels based on the highest level of media in an offender's collection looking at the average age for the youngest child depicted in each group F(4,65)=4.501, p<0.01. The difference in these means can be seen in Table 4.1.6.

When comparing the deviancy of the images and videos in the offender's collection, based on the highest rated image or video in his collection, with the sex of the children depicted, a significant relationship was only found for the highest rated image (Kendall's tau-c = -.217, N=72, p<0.05). This correlation shows that as the severity/deviancy of the image increased, the more likely the offender also possessed SEMIC that depicted boys. This is also an important finding and the implications will be discussed in Chapter 5. A similar relationship however, was not found when assessing just the videos (Kendall's tau-c = -.075, N=72, p>0.05) or the videos and images combined (Kendall's tau-c = -.189, N=72, p>0.05) and the sex of the children depicted. The distributions based on these offending behaviours can be seen in Table 4.1.5. These combined findings suggest that there is a distinction between the images and videos in an offender's collection in terms of deviancy patterns. Offenders who were in possession of the most deviant images based on the modified COPINE scale

were also likely to possess images that depicted boys. However, offenders that possessed the most deviant videos based on the modified COPINE scale, might not have possessed videos that depicted boys. The potential reasons and implications for practice of this finding will be discussed in greater detail in the next chapter, section 5.2.1.

No relationship was found when comparing the sex of the children depicted in the offender's collection with age bands of the youngest child depicted (Kendall's tau-c =0.153, N=66, $p>0.05$). The distributions can be seen in Table 4.1.5. However, when the age of the youngest child victim depicted was treated as continuous variable instead of falling within an age band category, a significant difference was found between the means ($F2,63)=4.131$, $p<0.05$). The mean age of the youngest child depicted for offenders who were in possession of SEMIC that depicted both male and female children (M=6; SD=4; N=30) was younger than the offenders who were in possession of SEMIC that depicted only male children (M= 9; SD= 4, N= 10) and only female children (M=8; SD=3; N=26).

Table 4.1.4: Correlations between internet sex offending behaviour variables from the police subset

	Kendall's tau-b if 2x2 or Kendall's tau-c if 2x3 or more							
	Male children depicted	Age band of the youngest child depicted	Highest rated SEMIC^	Number of images and videos	Where the SEMIC came from	Where the SEMIC was stored	Attempted to hide SEMIC	Distributed SEMIC
Age band of the youngest child depicted	0.153							
Highest rated image^	-0.217 *	-0.400 ***						
Highest rated video^	-0.075	-0.188						
Highest rated SEMIC^	-0.189	-0.342 ***						
Number of images and videos	0.232 #	-0.308 ***	0.231**					
Where the SEMIC came from	0.129	0.034	0.066	-0.113				
Where the SEMIC was stored	-0.127	-0.181 #	0.094	.327 ***	-0.129			
Attempted to hide SEMIC	0.017	0.051	-0.056	0.141	-0.113	-0.008		
Distributed SEMIC	-0.042	-0.109	0.150	-0.183 #	0.658 ***	-0.089	-0.186 #	
Produced SEMIC	0.002	0.193 *	-0.037	0.094	0.046	0.118 #	-0.092	-0.033

*** = significant to <0.05; ** = significant to < 0.01; *** = significant to < 0.001; # = marginally significant (<0.07); ^ Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Table 4.1.5: Distributions from the police subset assessing the offenders' SEMIC

	Number of Offenders (N=80)						
	Females only depicted	Males only depicted	Males & females depicted	Children under 3 & older	Pre-pubescent children (4-9 years) & older	Pubescent children (10-13 years) & older	Only late puberty children (14-17 years)
Media (Images and Videos)*							
Only Level 1	11 (15 %)	2 (3%)	8 (11%)	1 (1%)	8 (11%)	11 (16%)	1 (1%)
Level 2 & below	3 (4%)	2 (3%)	5 (7%)	0	5 (7%)	4 (6%)	1 (1%)
Level 3 & below	3 (4%)	1 (1%)	3(4%)	0	4 (6%)	2 (3%)	0
Level 4 & below	9 (12.5%)	4 (6%)	12 (17%)	4 (6%)	13 (19%)	5 (7%)	2 (3%)
Level 5 & below	1 (1%)	1 (1%)	7 (10%)	5 (7%)	3 (4%)	1 (1%)	0
Images*							
Only Level 1	13 (19%)	2 (3%)	8 (12%)	1 (1%)	9 (13%)	11 (16%)	2 (3%)
Level 2 & below	2 (3%)	2 (3%)	5 (7%)	0	4 (6%)	4 (6%)	1 (1%)
Level 3 & below	3 (4%)	1 (1%)	3 (4%)	0	4 (6%)	2 (3%)	0
Level 4 & below	7 (10%)	3 (4%)	12 (17%)	4 (6%)	12 (18%)	3 (4%)	1 (1%)
Level 5 & below	1 (1%)	1 (1%)	6 (9%)	5 (7%)	3 (4%)	1 (1%)	0
Videos*							
Only Level 1	2 (3%)	0	2 (3%)	0	1 (4%)	3 (12.5%)	0
Level 2 & below	4 (6%)	0	1 (1%)	0	5 (21%)	0	0
Level 3 & below	0	0	1 (1%)	0	1 (4%)	0	0
Level 4 & below	3 (4%)	3 (4%)	4 (6%)	2 (8%)	4 (17%)	4 (17%)	1 (4%)
Level 5 & below	0	0	5 (7%)	3 (12.5%)	0	0	0
Sex of children depicted							
Females only				1 (1.5%)	14 (21%)	9 (14%)	2 (3%)
Males only				1 (1.5%)	3 (4.5%)	5 (8%)	1 (1.5%)
Males & females				7 (11%)	13 (20%)	9 (14%)	1 (1.5%)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Table 4.1.6: Highest rated media/image in relation to mean age of youngest child depicted

	Mean Age of youngest child depicted (SD)	N (70 Total)
Highest rated media*		
Level 1	8.9 (3.21)	21
Level 2	8.6 (3.17)	10
Level 3	8.2 (2.40)	6
Level 4	6.7 (4.08)	24
Level 5	3.3 (3.64)	9
Highest rated Image*		
Level 1	9.0 (3.38)	23
Level 2	8.9 (3.22)	9
Level 3	8.2 (2.40)	6
Level 4	6 (3.85)	20
Level 5	3.33 (3.64)	9

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Total number of images/videos in relation to level, sex and age of the child

Several significant correlations were also found between the size of an offender's collection of SEMIC and the deviancy of that collection. These correlations suggest that as the size of an offender's collection goes up, so does the likelihood that he will have possessed some of the most deviant content, that depicting boys, very young children and penetrative sexual acts. This finding is of particular importance as it supports theory that with time offenders will become bored with or desensitised to the images and videos they were achieving sexual gratification from and will escalate to more deviant content to obtain the same level of arousal as previously enjoyed. The individual correlations are discussed in greater detail below.

A significant relationship was found between the number of images and videos an offender had in his collection of SEMIC and the highest rated in terms of severity/deviancy of those based on the modified COPINE scale (Kendall's tau-c=0.231, N=80, $p<0.01$). The distribution of these can be seen in Table 4.1.7. This correlation showed that as the size of the offender's collection got larger, the more deviant the images/videos were based on the modified COPINE scale. The mean distributions of the size of the offenders' collection of images and videos based on the highest rated image or video can be seen in Table 4.1.8.

Offenders who had media where level four was the highest rated media had the highest average number of media files at 9,652 (SD=39,845), whereas offenders who had media where level 2 was the highest rated media, had the smallest average collection size of 4,048 (SD=6,859) media files.

A marginally significant difference was also found between the number of images and videos an offender possessed and whether or not those images and videos depicted only female children, or if they depicted male children (only males and a combination of the male and female) (Kendall's tau-c=0.232, N=72, p=0.06). The distribution of the offenders can be seen in Table 4.1.7. This correlation showed that as the size of the offender's collection went up, the more likely he was to have been in possession of SEMIC that depicted boys.

There was also a significant negative correlation found between the size of an offender's collection of SEMIC and how deviant that collection was based on the age of the youngest child depicted (Kendall's tau-c=0-.308, N=80, p<0.001). This correlation showed that as the size of the offenders' collections got larger the age of the youngest child depicted got younger. As seen in Table 4.1.7, the majority of the offenders who possessed less than 100 images and videos, the youngest child depicted was in the early stages of puberty; only one offender possessed SEMIC where the youngest child depicted was younger than the age of three. This compares to the offenders who had more than 10,000 images and videos in their collection where the vast majority had media where the youngest child depicted was prepubescent and a quarter had images and videos where the youngest child depicted was younger than the age of three.

Table 4.1.7: Distribution of offenders based on number of images/videos and the level, sex and age of the children depicted

	Number of Offenders (N=80)			
	< 100 images & videos	101- 1,000 images & videos	1,001- 10,000 images & videos	>10,000 images & videos
Highest level of SEMIC possessed*				
Only Level 1	13 (16.3%)	4 (5%)	2 (2.5%)	3 (3.8%)
Level 2 and below	4 (5%)	2 (2.5%)	2 (2.5%)	2 (2.5%)
Level 3 and below	2 (2.5%)	3 (3.8%)	2 (2.5%)	2 (2.5%)
Level 4 and below	10 (12.5%)	6 (7.5%)	6 (7.5%)	3 (3.8%)
Level 5 and below	1 (1.3%)	4 (5%)	5 (6.3%)	3 (3.8%)
Sex of children depicted				
Only female	15 (20.8%)	2 (2.8%)	7 (9.7%)	3 (4.2%)
Only male	4 (5.6%)	3 (4.2%)	2 (2.8%)	1 (1.4%)
Male & female	8 (11.1%)	10 (13.9%)	8 (11.1%)	9 (12.5%)
Male (only male + male & female)	12 (16.7%)	13 (18.1%)	10 (13.9%)	10 (13.9%)
Age of the youngest child depicted				
Under 3 years old	1 (1.4%)	3 (4.3%)	3 (4.3%)	3 (4.3%)
Pre-pubescent (4-9 years old)	10 (14.3%)	8 (11.4%)	10 (14.3%)	5 (7.1%)
Pubescent (10-13 years old)	14 (20%)	2 (2.9%)	3 (4.3%)	4 (5.7%)
Late puberty (14-17 years old)	2 (2.9%)	2 (2.9%)	0	0
Mean Age of Youngest Child Depicted	9.3 (SD=3)	6.9 (SD=4.3)	5.3 (SD=3.5)	6.1 (SD=3.9)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Table 4.1.8: Mean size of offenders' collections of SEMIC based on rating level* and type

	Mean Number of Media (SD)	Mean Number of Images (SD)	Mean Number of Videos (SD)
Only Level 1	55.80 (13,807)	5,277 (13,242)	122 (206)
Level 2 and Below	4048 (6,859)	3,865 (7198)	293 (360)
Level 3 and Below	4976 (9,925)	4,963 (9,920)	1
Level 4 and Below	9652 (39,845)	10,963 (42,419)	24 (27)
Level 5 and Below	4896 (6747)	5,175 (6,790)	200 (400)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Table 4.1.9: Distribution of offenders based on the origin of SEMIC in relation to other characteristics from the police subset

	Number of Offenders (N=80)		
	Websites	**Peer 2 Peer**	**Multiple**
Highest level of SEMIC possessed*			
Only Level 1	16 (20%)	2 (2.5%)	3 (3.8%)
Level 2 and below	7(8.8%)	0	3 (3.8%)
Level 3 and below	5 (6.3%)	1 (1.3%)	3 (3.8%)
Level 4 and below	17 (21.3%)	4 (5%)	4 (5.3%)
Level 5 and below	10 (12.5%)	0	3 (3.8%)
Sex of children depicted			
Only female	18 (25%)	2 (2.8%)	7 (9.7%)
Only male	7 (9.7%)	0	3 (4.2%)
Male & female	27 (37.5%)	4 (5.6%)	3(4.2%)
Male (only male + male & female)	34 (47.2%)	4 (5.6%)	6 (8.3%)
Age of youngest child depicted			
Under 3 years old	9 (12.9%)	0	1 (1.4%)
Pre-pubescent (4-9)	22 (31.4%)	4 (5.7%)	7 (10%)
Pubescent (10-13)	16 (22.9%)	1 (1.4%)	6 (8.6%)
Late puberty (14-17)	2 (2.9%)	0	1 (1.4%)
Number of images & videos possessed			
< 100	18 (22.5%)	4 (5%)	8 (10%)
101- 1,000	12 (15%)	3 (3.8%)	3 (3.8%)
1,001- 10,000	14 (17.5%)	0	3 (3.8%)
>10,000	11 (13.8%)	0	2 (2.5%)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Origin of SEMIC in relation to size and deviancy

It was anticipated that there might have been a relationship between from where the offender obtained his SEMIC and how deviant that material was. This could be important to further enhancing the understanding of the offender's behaviour when making management recommendations or attempting to prevent future crimes. However, in terms of this sample, no relationships were found when comparing from where the offenders obtained the images and videos, and how deviant their collections were, based on: the highest rated image or video they possessed (Kendall's tau-c=0.066, N=80, $p>0.05$), the ages of the youngest child depicted in their collection (Kendall's tau-c=0.034, N=70, $p>0.05$) or the sex of the children depicted in the images and

videos (Kendall's tau-c=0.129, N=72, p>0.05). These distributions can be seen in Table 4.1.9. The implications of this in terms of practice and theory are discussed in greater detail in the next chapter.

Similarly, it was anticipated that there might also be a relationship between from where the offender obtained his SEMIC and how large his collection was. This also could be important in understanding a particular offender's behaviour when making management recommendations and for the police when targeting resources towards sources that supply the most content. However, no relationship was found when assessing from where the offenders obtained the images and videos in their collections of SEMIC and the size of those collections (Kendall's tau-c=-0.113, N=80, p>0.05). Those distributions can be seen in Table 4.1.9.

Storage location of SEMIC in relation to the size, deviancy and the origin of the images and videos

Relationships were found between the where the SEMIC was stored, and size and deviancy of the offender's collection of SEMIC. These correlations are discussed in greater detail below. These relationships suggest that storage location might be considered a risk factor for offenders who have large collections and some of the more deviant content. This relationship could be important when assessing risk, as it might demonstrate intent, and could also be useful for making management recommendations.

When comparing where the offenders stored their collections of SEMIC and how large those collections were, a significant relationship was found (Kendall's tau-c= .327, N=80, p<0.001). The distributions can be seen in Table 4.1.10. The mean number of images and videos show that those offenders that used only the internal hard drive of their computer had significantly smaller collections (1,101; SD=4,177) than the offenders who used both the internal hard drive and external storage devices (6,036; SD=10,831) and those offenders who only stored their collections on external devices (28,673; SD=75,549) (F 2,77)=4.043, p<0.05).

A marginally significant relationship was found between where the offender had stored his collection of SEMIC and the age band of the youngest child victims depicted in his collection (Kendall's tau-c=-0.181, N=70, p=0.052). The distribution of those can be seen in Table 4.1.10. This correlation showed that as the deviancy of the offenders' collections increased based on the age band of the youngest child depicted, the likelihood that the offender stored his SEMIC on an external hard drive decreased. A similar result was found when treating the age of the youngest child depicted as a continuous variable. The mean age of the youngest child depicted showed that those offenders who stored their images and videos on both the internal hard drive of their computer and external storage devices were significantly younger (6.3 years old; SD=3.75) than those offenders who only stored the images and videos on the internal hard drive of their computer (8.5 years old; SD=3.95) and those that only stored their collections on external devices (9.1 years old; SD=2.85) ($F_{2,67}=3.514$, $p<0.05$).

No other relationships were found between where the offender stored his collection of SEMIC and the other deviancy factors measured: sex of the children depicted (Kendall's tau-c=-0.127, N=72, p>0.05) or the rating of the highest image or video in his collection (Kendall's tau-c= 0.094, N=80, p>0.05). A relationship was also not found between where the images and videos where from and where the offender stored them (Kendall's tau-c = -0.129, N=80, p>0.05). The distribution of these factors can also be seen in Table 4.1.10.

Table 4.1.10: Distribution of offenders based on where the offenders stored his collection of SEMIC in relation to other factors from the police subset

	Number of Offenders (N=80)		
	Internal hard drives	External storage devices	Both internal & external devices
Highest level of SEMIC*			
Only Level 1	8 (10%)	3 (3.8%)	11 (13.8%)
Level 2 and Below	3 (3.8%)	1 (1.3%)	6 (7.5%)
Level 3 and Below	4 (5%)	0	5 (6.3%)
Level 4 and Below	9 (11.3%)	2 (2.5%)	14 (17.5%)
Level 5 and Below	2 (2.5%)	1 (1.3%)	10 (12.5%)
Sex of the children depicted			
Only female	12 (16.7%)	1 (1.4%)	14 (19.4%)
Only male	3 (4.2%)	2 (3.8%)	5 (6.9%)
Male & female	9 (12.5%)	3 (4.2%)	23 (31.9%)
Male (only male + male & female)	12 (16.7%)	5 (6.9%)	28 (38.9%)
Age of the youngest child depicted			
Child under 3 years old	1 (1.4%)	0	9 (12.9%)
Pre-pubescent (4-9 years old)	13 (18.6%)	3 (4.3%)	17 (24.3%)
Pubescent (10-13 years old)	7 (10%)	3 (4.3%)	13 (18.6%)
Late puberty (14-17 years old)	3 (4.3%)	1 (1.4%)	0
Number of images and videos			
< 100	16 (20%)	4 (5%)	11 (13.8%)
101- 1,000	5 (6.3%)	2 (2.5%)	12 (15%)
1,001- 10,000	4 (5%)	0	13 (16.3%)
>10,000	1 (1.3%)	1 (1.3%)	11 (13.8%)
Source of SEMIC			
Websites	14 (17.5%)	6 (7.5%)	35 (43.8%)
Peer 2 Peer	4 (5%)	0	3 (3.8%)
Multiple sources	8 (10%)	0	8 (10%)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

The use of encryption or other methods to hide SEMIC in relation to the size, deviancy, storage location and source of the offender's collection of SEMIC

An exploratory analysis was conducted to assess whether or not there were any relationships between offenders who used encryption or other methods to hide their SEMIC, with any other behavioural factors. No relationships were found when assessing whether or not an offender attempted to hide any of the images or videos in his collection of SEMIC through

encryption or other means, compared with the size of the offender's collection (Kendall's tau-c= 0.141, N=80, p>0.05) or any of the deviancy measures: highest rated image or video in the offender's collection (Kendall's tau-c= -0.056, N=80, p>0.05), sex of the children depicted (Kendall's tau-c= 0.017, N=72, p>0.05) or age band of the youngest child depicted (Kendall's tau-c= 0.051, N=70, p>0.05). There was also no relationship found between whether or not the offender attempted to hide any images or videos and from where the offender obtained the images and videos (Kendall's tau-c= -0.113, N=80, p>0.05) or where he stored them (Kendall's tau-c= -0.008, N=80, p>0.05). The distribution of these factors can be seen in Table 4.1.11.

Offenders who distributed SEMIC in relation the other factors that described their offending behaviour

The law ("Civic Government (Scotland) Act," 1982) considers offenders that distributed SEMIC to be more serious offenders than those who have only collected SEMIC. However, it is not known if there is a link between some of the more serious collectors (those with the largest collections and most deviant material) and those offenders who distribute SEMIC. It was anticipated that offenders with the larger collections and most deviant content would be more likely to also be distributing. This association could suggest escalation from collecting to something more serious and would be useful in assessing an offender's risk to reoffend as well as managing that risk. However, this sample suggested an opposite effect. A marginally significant difference was found between the offenders who distributed SEMIC and those who did not when compared by the size of their collection of images and videos (Kendall's tau-c = -0.183, N=80, p= 0.053). As seen in Table 4.1.12, the distributions show that the offenders with smaller collections were more likely to be distributing images and videos than the offenders with very large collections.

No relationships were found between whether or not the offender distributed SEMIC and the three deviancy measures of their collections: highest rated image or video (Kendall's tau-c = 0.150, N=80, p> 0.05), sex of the children

depicted (Kendall's tau-c = -0.042, N=72, p> 0.05) or age band of the youngest child depicted in an image or video (Kendall's tau-c = -0.109, N=70, p> 0.05).

Due to the nature of how peer 2 peer networks work, it was anticipated that there would be a relationship between from where the offenders had obtained their SEMIC and whether or not they were distributing. As expected, a significant relationship was found showing that offenders who got their images and videos from peer 2 peer networks or multiple sources which included peer 2 peer networks were more likely to have been distributing SEMIC than offenders who obtained their images and videos only from websites (Kendall's tau-c = 0.658, N=80, p< 0.001).

A marginally significant relationship was also found between whether or not an offender was distributing SEMIC and whether or not he also attempted to hide any images or videos through encryption or other means (Kendall's tau-b = -0.186, N=70, p= 0.59). As seen in Table 4.1.12, the offenders who were distributing were not likely to be hiding any images or videos.

Table 4.1.11: Distribution of offenders based on the offenders' use of encryption in relation to other factors from the police subset

	Number of Offenders (N=80)	
	Used encryption or other methods to hide images or videos	Did not attempt to hide images or videos
Highest level of SEMIC*		
Only Level 1	6 (7.5%)	16 (20%)
Level 2 and Below	2 (2.5%)	8 (10%)
Level 3 and Below	6 (7.5%)	3 (3.8%)
Level 4 and Below	7 (8.8%)	18 (22.5%)
Level 5 and Below	3 (3.8%)	10 (12.5%)
Sex of the children depicted		
Only female	8 (11.1%)	19 (26.4%)
Only male	4 (5.6%)	6 (8.3%)
Male & female	10 (13.9%)	25 (34.7%)
Male (only male + male & female)	14 (19.4%)	31 (43.1%)
Age of the youngest child depicted		
Child under 3 years old	3 (4.3%)	7 (10%)
Pre-pubescent (4-9 years old)	8 (11.4%)	25 (35.7%)
Pubescent (10-13 years old)	8 (11.4%)	15 (21.4%)
Late puberty (14-17 years old)	1 (1.4%)	2 (4.3%)
Number of images and videos		
< 100	5 (6.3%)	26 (32.5%)
101- 1,000	10 (12.5%)	9 (11.3%)
1,001- 10,000	7 (8.8%)	10 (12.5%)
>10,000	3 (3.8%)	10 (12.5%)
Source of SEMIC		
Websites	19 (23.8%)	36 (45%)
Peer 2 Peer	1 (1.3%)	6 (7.5%)
Multiple sources	4 (5%)	12 (15%)
Storage location of SEMIC		
Internal hard drive	9 (11.3%)	17 (21.3%)
External devices	1 (1.3%)	6 (7.5%)
Both internal hard drive & external devices	15 (18.8%)	32 (40%)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Table 4.1.12: Distribution of offenders who distributed SEMIC in relation to other factors describing their offending behaviour from the Police subset

	Number of Offenders (N=80)	
	Distributed images or videos	Did not distribute
Highest level of SEMIC*		
Only Level 1	3 (3.8%)	19 (23.8%)
Level 2 and Below	2 (2.5%)	8 (10%)
Level 3 and Below	3 (3.8%)	6 (7.5%)
Level 4 and Below	7 (8.8%)	18 (22.5%)
Level 5 and Below	5 (5%)	9 (11.3%)
Sex of the children depicted		
Only female	5 (6.9%)	22 (30.6%)
Only male	2 (2.8%)	8 (11.1%)
Male & female	8 (11.1%)	27 (37.5%)
Male (only male + male & female)	10 (13.9%)	35 (48.6%)
Age of the youngest child depicted		
Child under 3 years old	2 (2.9%)	8 (11.4%)
Pre-pubescent (4-9 years old)	10 (14.3%)	23 (32.9%)
Pubescent (10-13 years old)	4 (5.7%)	19 (27.1%)
Late puberty (14-17 years old)	0	4 (5.7%)
Number of images and videos		
< 100	9 (11.3%)	22 (27.5%)
101- 1,000	7 (8.8%)	12 (15%)
1,001- 10,000	2 (2.5%)	15 (18.8%)
>10,000	1 (1.3%)	12 (15%)
Source of SEMIC		
Websites	2 (2.5%)	53 (66.3%)
Peer 2 Peer	6 (7.5%)	1 (1.3%)
Multiple sources	11 (13.8%)	5 (6.3%)
Storage location of SEMIC		
Internal hard drive	9 (11.3%)	17 (21.3%)
External devices	0	7 (8.8%)
Both internal hard drive & external devices	10 (12.5%)	37 (46.3%)
Attempted to hide SEMIC with encryption or other means		
Yes	3 (3.8%)	22 (27.5%)
No	16 (20%)	39 (48.8%)
Distributed SEMIC		
Yes		
No		

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

Offenders who produced SEMIC in relation the other factors that described their offending behaviour

Similar to offenders who distribute SEMIC, the law considers those offenders who produce SEMIC to be more serious offenders than those who only collect it. As described in Chapter 2, it is not fully known if there is a relationship between any specific SEMIC collecting behaviours and those offenders who produce images. One practical concern is that offenders who collect SEMIC will eventually escalate to committing contact offenses and begin producing their own SEMIC. Based on that assumption, offenders who produced SEMIC should also possess very large collections of the most deviant content. The results however, suggest the opposite relationship. A significant correlation showed that offenders who produced SEMIC were likely in possession of less deviant images and videos based on the age of the youngest child depicted than offenders who did not produce SEMIC (Kendall's tau-c = 0.193, N=70, $p< 0.05$). This distinction is more pronounced when the age of the youngest child depicted was treated as a continuous variable instead of an age band with the mean age of the youngest child depicted for those offenders who produced SEMIC (10.1 years old; SD=3.44) and those offenders who did not produce SEMIC (6.9 years old; SD=3.80) being significantly different ($F\ 1,68)=5.667$, $p<0.05$). These finding have implications as to how internet sex offenders should be assessed for recidivism risk and also have implications for their management.

No relationships were found between whether or not the offender was a producer of SEMIC and the other two deviancy factors: highest rated image or video in his collection (Kendall's tau-c = -0.037, N=80, $p< 0.05$); sex of the children depicted (Kendall's tau-c = 0.002, N=72, $p< 0.05$) or the size of the offender's collection of images and videos (Kendall's tau-c = 0.094, N=80, $p< 0.05$). Similarly, there were also no relationships found between the offenders who produced SEMIC and those that did not when compared by the origin of the images and videos (Kendall's tau-c = 0.046, N=80, $p< 0.05$), whether or not the

offender attempted to hide any images or videos (Kendall's tau-b = -0.092, N=80, p< 0.05) or whether or not the offender distributed SEMIC (Kendall's tau-b = -0.033, N=80, p< 0.05). The distribution of these factors can be seen in Table 4.1.13.

A marginally significant relationship was also found between the offenders who were producers and those who were not when compared by where they stored their collections of SEMIC (Kendall's tau-c = 0.118, N=80, p= 0.066). As seen in Table 4.1.13, the distributions show that producers stored their collections on a combination of external and internal devices. This too could have implications for management.

Table 4.1.13: Distribution of offenders who produced SEMIC in relation to other factors describing their offending behaviour from the Police subset

	Number of Offenders (N=80)	
	Produced SEMIC	**Did not produce SEMIC**
Highest level of SEMIC*		
Only Level 1	3 (3.8%)	19 (23.8%)
Level 2 and Below	1 (1.3%)	9 (11.3%)
Level 3 and Below	2 (2.5%)	7 (8.8%)
Level 4 and Below	3 (3.8%)	22 (27.5%)
Level 5 and Below	1 (1.3%)	12 (15%)
Sex of the children depicted		
Only female	4 (5.6%)	23 (31.9%)
Only male	1 (1.4%)	9 (12.5%)
Male & female	5 (6.9%)	30 (41.7%)
Male (only male + male & female)	6 (8.3%)	39 (54.2%)
Age of the youngest child depicted		
Child under 3 years old	0	10 (14.3%)
Pre-pubescent (4-9 years old)	3 (4.3%)	30 (42.9%)
Pubescent (10-13 years old)	4 (5.7%)	19 (27.1%)
Late puberty (14-17 years old)	2 (2.9%)	2 (2.9%)
Number of images and videos		
< 100	2 (2.5%)	29 (36.6%)
101- 1,000	3 (3.8%)	16 (20%)
1,001- 10,000	3 (3.8%)	14 (17.5%)
>10,000	2 (2.5%)	11 (13.8%)
Source of SEMIC		
Websites	5 (6.3%)	50 (62.5%)
Peer 2 Peer	0	7 (8.8%)
Multiple sources	4 (5%)	12 (15%)
Storage location of SEMIC		
Internal hard drive	1 (1.3%)	25 (31.3%)
External devices	1 (1.3%)	6 (7.5%)
Both internal hard drive & external devices	8 (10%)	39 (48.8%)
Attempted to hide SEMIC with encryption or other means		
Yes	2 (2.5%)	23 (28.7%)
No	8 (10%)	47 (58.8%)
Distributed SEMIC		
Yes	2 (2.5%)	17 (21.3%)
No	8 (10%)	53 (66.3%)

*Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit

4.2: Criminal justice social work subset

This subset examined the social enquiry reports produced by criminal justice social workers on 30 of the internet sex offenders from the police subset. The criminal justice social workers mainly collected information relating to the demographic characteristics of the offenders as well as specific attitudes they might have expressed about the crime. Any distinctions made by the criminal justice social workers were based on those characteristics. These included, the age, marital status, educational history, employment history and socio-economic status of the offender. They also included whether or not the offender was known to have been abused as a child, whether or not he has access to children, whether or not he expressed remorse, admitted guilt or declared a sexual interest in children. The reports also assigned recidivism risk ratings to each of the offenders.

4.2.1: Descriptive Statistics

The distribution of the offenders based on the characteristics found in the social enquiry reports can be seen in Table 4.2.2. These distributions suggest the majority of this sample of internet sex offenders came from a non abusive home, were educated, were likely to be in a relationship and had access to children under the age of 18 years old. The majority of offenders were also likely to admit guilt, but not express remorse or declare that they had a sexual interest in children. They were also likely to have been rated a medium to high risk to reoffend.

Age of the offender when the crime was committed

The age range of the current sample of offenders was 18 to 69 years of age, where both the mean and the median age were 37 years old (N=64; SD=11.9). The assumption of normality was tested with the S-W method and the results (SW=.974, df=65, p>0.05) as well as the skewness (.283) and kurtosis (-.619) showed that normality was the correct assumption. The distributions of

offenders based on their age when they committed the crime can be seen in Table 4.2.1.

Table 4.2.1: Distribution of offenders based on their ages when the crimes were committed

	Total N = 64 (%)*
Teen's	3 (3.8%)
20's	17 (21.3%)
30's	15 (18.8%)
40's	17 (21.3%)
50's	10 (12.5%)
60's	2 (2.5%)

*** As a result of variability in the reports not all values were reported for every offender; these are supplemented from the police reports**

The offenders' childhood upbringing and educational attainments

In this subset, 52% of the offenders were raised in a home with two parents and the offenders did not report any abuse, this was followed by 30% of the offenders that came from an abusive home and 18.5% that came from a single parent home. The vast majority of offenders in this subset received only school level education, whereas four offenders went to college and two went to university.

The offenders' social and family status at the time of the crime

Just over a third (37%) of the offenders in this subset were single and just under a third were married (30%). Almost equal in distribution and about a third of the overall offenders combined were either divorced or living with a partner. Approximately a third of the offenders (37.5%) did not have a current sexual partner at the time they committed the crime. Just under half of the offenders (48%) had minor children and one offender had access to minor children who were not his own.

Socio-economic status of the offenders

The largest concentration of offenders, 37%, was identified as being in the non-working social class. Approximately a fifth of the offenders (22%) were in the working class and around another fifth (18.5%) were in the skilled working class. Just under a tenth (7%) were in the lower middle class and 15% in the middle class.

Offenders' attitudes toward the crime

The vast majority (70%) of the offenders admitted guilt. However, this is in contrast with the 81.5% of the offenders who did not express any remorse for what they had done. Just over a third of the offenders (37%) admitted to being sexually attracted to children.

Risk rating given by criminal justice social workers

Close to equal numbers of offenders were rated low, medium and high risk to reoffend by the Criminal Justice Social worker based on the Risk Matrix 2000, with the medium risk to reoffend having a slightly higher frequency. While the numbers were much smaller, a very similar pattern can be seen with the distributions of the ratings to reoffend based on the Stable/Acute.

Table 4.2.2: Frequencies taken from the criminal justice social work subset related to the offenders' demographic characteristics

	Number of offenders/N*
Family background	
Two parent home with no reported abuse	14/27 (52%)
Single parent home with no reported abuse	5/27 (18.5%)
Abusive home	8/27 (30%)
Offender marital/relationship status	
Single	10/27 (37%)
Married	8/27 (30%)
Divorced	5/27 (18.5%)
Living with a partner	4/27 (15%)
Offender had sexual partner at time of report	
Yes	15/24 (62.5%)
No	9/24 (37.5%)
Offender has access to minor children	
His own	13/27 (48%)
Other children or his own	14/27 (52%)
Offender's highest level of education	
University	2/27 (7%)
College	4/27 (15%)
School	21/27 (78%)
Offender's Socio-Economic Status	
Non-working social class	10/27 (37%)
Working class	6/27 (22%)
Skilled working class	5/27 (18.5%)
Lower middle class	2/27 (7%)
Middle class	4/27 (15%)
Offender's attitudes toward the crime	
Admitted guilt	19/27 (70%)
Expressed remorse	5/27 (18.5%)
Declared a sexual interest in children	10/27 (37%)
RM2000 rating	
Low risk	8/25 (32%)
Medium risk	10/25 (40%)
High risk	7/25 (28%)
Stable/Acute rating	
Low risk	3/11 (27.3%)
Medium risk	5/11 (45.5%)
High risk	3/11 (27.3%)

*** As a result of variability in the SER's not all values were reported for every offender**

4.2.2: Correlations and Cross Tabulations between demographic and offender attitude characteristics

As mentioned in the previous section, one of the aims of this thesis was to provide insight into potential differences between internet sex offenders and how that might inform or effect how practitioners assess their risk to reoffend and what management options the practitioners find most suitable to mitigate those risks. Because it is not yet known which characteristics are most important for assessing the risk internet sex offenders pose to recidivate, some comparisons to known factors increasing the recidivism risk for contact sex offenders who target children have been made. This section mostly focuses on how the attitudes the offender expressed might relate to some of the other demographic characteristics used to distinguish them within the social enquiry reports and can be seen in Table 4.2.4. These relationships might provide insight into to why an offender held the beliefs he did, which in turn might help with management strategies used to mitigate undesirable attitudes in the future.

Age of the offender in relation to his attitudes about the crime

Relationships between the offender's age and the attitudes he might have expressed about the crime were tested. Younger offenders could be closer to the age of the children depicted and as such think their behaviour falls within the norm and as a result, younger offenders might be less inclined to declare a sexual attraction to children, express remorse or admit guilt for what they had done. However, within this sample, no differences were found between the mean age of the offenders (Table 4.2.3) when comparing whether or not they admitted guilt ($F\ 1,21)=2.472$, $p>0.05$), whether or not they expressed remorse ($F\ 1,21)=1.324$, $p>0.05$) and whether or not they declared a sexual attraction to children ($F\ 1,21)=0.008$, $p>0.05$).

Admission guilt in relation to other demographic factors

Offenders, who admitted guilt, could have done so for a common reason, perhaps fear of losing access to their children. However, no relationships were

found between whether or not the offender admitted guilt and any of their other demographic characteristics. This included their upbringing (Kendall's tau-c = 0.258, N=27, p>0.05) and educational history (Kendall's tau-c = 0.126, N=27, p>0.05). Similarly, no relationships were found between whether or not the offender admitted guilt and his relationship status (Kendall's tau-c = -0.159, N=27, p>0.05), whether or not he had a current sexual partner (Kendall's tau-c = -0.035, N=27, p>0.05) and whether or not he had minor children (Kendall's tau-b = 0.126, N=27, p>0.05) or access to minor children (Kendall's tau-b = 0.170, N=27, p>0.05). There was also no relationship found between whether or not the offender admitted guilt and the offenders' socio-economic status (Kendall's tau-c = 0.038, N=27, p>0.05). These distributions can be seen in Table 4.2.5.

Table 4.2.3: Mean age of the offenders based on their attitudes about the crime

	Mean Age (SD)	n (N=23)*
Admitted guilt	41.38 (12.63)	16
Did not admit guilt	33.39 (7.25)	7
Expressed remorse	45 (12.73)	4
Did not express remorse	37.63 (11.45)	19
Declared a sexual attraction to children	37.67 (5.89)	6
Denied a sexual attraction to children	39.35 (13.32)	17

*** As a result of variability in the SER's not all values were reported for every offender**

Table 4.2.4: Correlations between offender attitudes and demographic characteristics

	Kendall's tau-b if 2x2 or Kendall's tau-c if 2x3 or more		
	Admission of guilt	Expression of remorse	Declared sexual attraction to children
Expression of remorse	0.309 *		
Declared sexual attraction to children	0.421 **	0.526 *	
Abused as a child	0.258	0.198	0.296
Educational history	0.126	-0.165 *	-0.126
Relationship status	-0.159	-0.368 *	-0.307
Current sexual partner	-0.035	-0.356 *	-0.299
Has children under 18 YO	0.126	-0.269	0.024
Has access to children under 18 YO	0.170	-0.304	-0.027
Socio-economic status	0.038	0.027	-0.140

* = significant to <0.05; ** = significant to < 0.01 Correlations between other demographic characteristics not tested

Table 4.2.5: Distribution of offenders who admitted guild in relation to other demographic characteristics

	Number of Offenders (N=27)*	
	Admitted guilt	**Did not admit guilt**
Family background		
Two parent home with no reported abuse	8 (29.6%)	6 (22.2%)
Single parent home with no reported abuse	4 (14.8%)	1 (3.7%)
Abusive home	7 (25.9%)	1 (3.7%)
Offender marital/relationship status		
Single	8 (29.6%)	2 (74%)
Married	5 (18.5%)	3 (11.1%)
Divorced	4 (14.8%)	1 (3.7%)
Living with a partner	2 (7.4%)	2 (7.4%)
Offender had sexual partner at time of report		
Yes	10 (41.7%)	5 (20.8%)
Offender had access to minor children		
His own	10 (37%)	3 (11.1%)
Other children or his own	11 (40.7%)	3 (11.1%)
Offender's highest level of education		
University	2 (7.4%)	0
College	3 (11.1%)	1 (3.7%)
School	14 (51.9%)	7 (25.9%)
Offender's Socio-Economic Status		
Non-working class	8 (29.6%)	2 (7.4%)
Working class	3 (11.1%)	3 (11.1%)
Skilled working class	2 (7.4%)	3 (11.1%)
Lower middle class	2 (7.4%)	0
Middle class	4 (14.8%)	0

*** As a result of variability in the SER's not all values were reported for every offender**

Expression of remorse in relation to other demographic factors

The vast majority of offenders in this sample did not express any remorse for what they had done. Commonality between the offenders who did express remorse and other demographic characteristics might explain their reason for that expression. Several relationships were found. Offenders who expressed remorse were less likely to be have attended college or university, more likely to be single and less likely to have a current sexual partner. These relationships are described in further detail below.

A relationship was found between whether or not an offender expressed remorse and the highest level of educational obtained by the offender (Kendall's tau-c = -0.165, N=27, $p<0.05$). As seen in Table 4.2.7, the distributions show that the higher educated offenders (those that attended college and university) were less likely to express remorse than those offenders who only attended some school level education.

A relationship was also found between whether or not an offender expressed remorse and the offender's relationship status (Kendall's tau-c = -0.368, N=27, $p<0.05$). The distributions can be seen in Table 4.2.7. Similarly, a relationship was also found between whether or not and offender expressed remorse and whether or not that offender had a current sexual partner (Kendall's tau-b = -0.356, N=24, $p<0.05$). As seen in Table 4.2.7, the distributions show that offenders who had current sexual partners were less likely to express remorse than the offenders that did not have a current sexual partner.

No relationships were found between whether or not the offender expressed remorse and the offender's upbringing (Kendall's tau-c = 0.198, N=27, $p>0.05$), whether or not he had minor children (Kendall's tau-b = -0.269, N=27, $p>0.05$), or access to minor children (Kendall's tau-b = -0.304, N=27, $p>0.05$), or his socio-economic status (Kendall's tau-c = 0.027, N=27, $p>0.05$). These distributions can all be seen in Table 4.2.7.

Declared sexual attraction to children in relation to other demographic factors

Very few offenders declared a sexual interest in children. Similar to the other two attitudes previously reported on, relationships between the offenders who did declare a sexual interest in children and other demographic characteristics used to describe them by the criminal justice social workers were tested. However, no relationships were found between whether or not the offender declared a sexual attraction to children and the demographic characteristics that described their upbringing (Kendall's tau-c = 0.296, N=27, $p>0.05$) or educational history (Kendall's tau-c = -0.126, N=27, $p>0.05$). Similarly, no relationships were found between whether or not the offender

declared a sexual attraction to children and his relationship status (Kendall's tau-c = -0.307, N=27, p>0.05), whether or not he had a current sexual partner (Kendall's tau-c = -0.299, N=24, p>0.05) and whether or not he had minor children (Kendall's tau-b = 0.024, N=27, p>0.05) or access to minor children (Kendall's tau-b = -0.027, N=27, p>0.05). There was also no relationship found between whether or not the offender declared a sexual attraction to children and the offenders' socio-economic status (Kendall's tau-c = -0.140, N=27, p>0.05). These distributions can be seen in Table 4.2.8.

Comparison of the offender's attitudes towards the crime

This thesis aimed to explore how the attitudes this sample of internet sex offenders expressed might have related to one another and how those relationships might help inform the level of risk a particular offender might present and what management strategies might be useful in mitigating those risks. Several relationships were found suggesting these attitudes might be useful in understanding the motivations behind these offenders, which in turn might assist with assessment and management strategies.

A relationship was found between the offenders who admitted guilt or not when compared by whether or not the offender expressed remorse (Kendall's tau-b = 0.309, N=27, p<0.05). As seen in Table 4.2.6, the distributions show that offenders who admitted guilt were more likely to also express remorse, as well as the opposite, the offenders who didn't admit guilt, were less likely to express remorse.

A significant relationship was also found between the offenders who admitted guilt or not when compared by whether or not they declared a sexual attraction to children (Kendall's tau-b = 0.421, N=27, p<0.01). The distributions (Table 4.2.6) show that offenders who admitted guilt were more likely to have declared a sexual attraction to children than the offenders who did not admit guilt.

There was also a relationship found between the offenders who expressed remorse and those who did not when compared by whether or not the offender declared a sexual attraction to children (Kendall's tau-b = 0.526,

N=27, p<0.05). As shown in Table 4.2.6, the distribution shows that offenders who expressed remorse were more likely to have declared a sexual attraction to children.

Table 4.2.6: Distribution of offenders comparing their attitudes towards the crime

	Number of Offenders (N=27)*			
	Expressed remorse	**Did not express remorse**	**Declared sexual attraction to children**	**Denied sexual attraction to children**
Admitted guilt	5 (18.5%)	14 (51.9%)	8 (29.6%)	11 (40.7%)
Did not admit guilt	0	8 (29.6%)	0	8 (29.6%)
Expressed remorse			4 (14.8%)	1 (3.7%)
Did not express remorse			4 (14.8%)	18 (66.7%)

*** As a result of variability in the SER's not all values were reported for every offender**

Table 4.2.7: Distribution of offenders who expressed remorse in relation to other demographic characteristics

	Number of Offenders (N=27)*	
	Expressed remorse	**Did not express remorse**
Family background		
Two parent home with no reported abuse	1 (3.7%)	13 (48.1%)
Single parent home with no reported abuse	1 (3.7%)	4 (14.8%)
Abusive home	3 (11.1%)	5 (18.5%)
Offender marital/relationship status		
Single	4 (14.8%)	6 (22.2%)
Married	1 (3.7%)	7 (25.9%)
Divorced	0	5 (18.5%)
Living with a partner	0	4 (14.8%)
Offender had sexual partner at time of report		
Yes	1 (4.2%)	14 (58.3%)
Offender had access to minor children		
His own	1 (3.7%)	12 (44.4%)
Other children or his own	1 (3.7%)	13 (48.1%)
Offender's highest level of education		
University	0	2 (7.4%)
College	0	4 (14.8%)
School	5 (18.5%)	16 (59.3%)
Offender's Socio-Economic Status		
Non-working class	2 (7.4%)	8 (29.6%)
Working class	1 (3.7%)	5 (18.5%)
Skilled working class	0	5 (18.5%)
Lower middle class	1 (3.7%)	1 (3.7%)
Middle class	1 (3.7%)	3 (11.1%)

*** As a result of variability in the SER's not all values were reported for every offender**

Table 4.2.8: Distribution of offenders who declared a sexual interest in children in relation to other demographic characteristics

	Number of Offenders (N=27)*	
	Declared sexual attraction to children	**Denied sexual attraction to children**
Family background		
Two parent home with no reported abuse	2 (7.4%)	12 (44.4%)
Single parent home with no reported abuse	2 (7.4%)	3 (11.1%)
Abusive home	4 (14.8%)	4 (14.8%)
Offender marital/relationship status		
Single	5 (18.5%)	5 (18.5%)
Married	1 (3.7%)	7 (25.9%)
Divorced	2 (7.4%)	3 (11.1%)
Living with a partner	0	4 (14.8%)
Offender had sexual partner at time of report		
Yes	2 (8.4%)	13 (54.2%)
Offender had access to minor children		
His own	4 (14.8%)	9 (33.3%)
Other children or his own	4 (14.8%)	10 (37%)
Offender's highest level of education		
University	0	2 (7.4%)
College	1 (3.7%)	3 (11.1%)
School	7 (25.9%)	14 (51.9%)
Offender's Socio-Economic Status		
Non-working class	4 (14.8%)	6 (22.2%)
Working class	1 (3.7%)	5 (18.5%)
Skilled working class	1 (3.7%)	4 (14.8%)
Lower middle class	1 (3.7%)	1 (3.7%)
Middle class	1 (3.7%)	3 (11.1%)

*As a result of variability in the SER's not all values were reported for every offender

4.3: Post-hoc analysis between characteristics describing offending behaviour, demographics and offender attitudes

4.3.1: Correlations and Cross Tabulations

This section reports on an exploratory post-hoc analysis. As already discussed, one of the aims of this thesis was to provide insight into potential differences between internet sex offenders and how this data might inform or effect how practitioners assess offenders risk to reoffend and what management options the practitioners find most suitable to mitigate those risks. As it is not yet known which characteristics are most important for assessing the risk internet sex offenders pose to recidivate, comparisons to known factors increasing the recidivism risk for contact sex offenders who target children have been made. As not all of these factors are completely salient with internet sex offenders, correlational analysis was used to assess for any potential additive or deductive relationships between several of the characteristics exclusive to internet sex offenders and those that likely relate to both internet and contact offenders who target children. This section reports on the relationships found or not found between select characteristics that describe offender's behaviour in relation to select characteristics that describe their demographics and the attitudes they might have held. These correlations can be seen in Table 4.3.3. Several significant relationships were found and will be discussed in greater detail below. How these results fit within the context of current theory and how they might affect practice is discussed in greater detail in the next chapter.

Offenders' age in relation to the size and deviancy of the collection of SEMIC

A marginally significant negative correlation was found between the mean ages of the offenders when the crime was committed and the mean age of the youngest child victims depicted in their collections of SEMIC ($r=-.241$, $p=0.063$). As seen in Table 4.3.1, as the age of the youngest child victim depicted got younger, the mean age of the offender got older. This suggests that younger offenders have less deviant sexual interests than older offenders and as a result

could be a lower risk to reoffend. This contradicts factors known to increase the likelihood contact sex offenders who target children will recidivate, showing a possible divergence between internet and contact offenders. This is potentially an important finding for both the assessment of risk and the management of internet sex offenders.

No relationships were found between the age of the offender and the other two deviancy measures: sex of the children depicted ($F_{2,57}=1.440$, $p>0.05$) and the highest rated image or video in the offender's collection ($F_{4,60}=0.499$, $p>0.05$). Similarly, no relationship was found between the age of the offender and the size of his collection ($F_{3,61}=1.517$, $p>0.05$). The mean ages of the offenders for these factors can be seen in Table 4.3.1.

No relationships were found between the age bands of the offenders when they committed the crime and the sex of the children depicted in his collection of SEMIC (Kendall's tau-c = 0.019, N=64, $p>0.05$) or the highest rated image or video in his collection (Kendall's tau-c = 0.007, N=24, $p>0.05$). Similarly, no relationship was found between the offender's age and the size of his collection of SEMIC (Kendall's tau-c = 0.162, N=64, $p>0.05$). These distributions can be seen in Table 4.3.2.

Table 4.3.1: Mean age of the offenders in relation to the quantity and deviancy of the SEMIC

	Mean Age of Offender (SD)
Age of the youngest child depicted	
<3 Years Old	44.29 (6.264)
Pre-pubescent (4-9 Years Old)	37.21 (11.586)
Early puberty (10-13 Years Old)	36.36 (12.253)
Late puberty (14-17 Years Old)	19.50 (3.536)
Sex of the children depicted	
Only female	38.54 (12.148)
Only male	30.67 (9.937)
Both male and female	37 (12.341)
Male (only male + male & female)	35.42 (11.977)
Highest level of SEMIC*	
Only Level 1	38.50 (10.662)
Level 2 and below	34.63 (14.530)
Level 3 and below	34.78 (8.614)
Level 4 and below	35.83 (12.960)
Level 5 and below	41.29 (12.880)
Number of images and videos	
< 100	34.35 (12.103)
101- 1,000	35.56 (11.243)
1,001- 10,000	42.36 (12.407)
>10,000	37.89 (10.006)

***Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Table 4.3.2: Frequency of offender age bands in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*					
	17-19	**20's**	**30's**	**40's**	**50's**	**60's**
Age of the youngest child depicted						
<3 Years Old	0	0	1/59 (1.7%)	4/59 (6.8%)	2/59 (3.4%)	0
Pre-pubescent (4-9 Years Old)	1/59 (1.7%)	7/59 (11.9%)	8/59 (13.6%)	7/59 (11.9%)	4/59 (6.8%)	1/59 (1.7%)
Early puberty (10-13 Years Old)	1/59 (1.7%)	6/59 (10.2%)	6/59 (10.2%)	5/59 (8.5%)	3/59 (5.1%)	1/59 (1.7%)
Late puberty (14-17 Years Old)	1/59 (1.7%)	1/59 (1.7%)	0	0	0	0
Sex of the children depicted						
Only female	1/59 (1.7%)	5/59 (8.5%)	7/59 (11.9%)	4/59 (6.8%)	5/59 (8.5%)	1/59 (1.7%)
Only male	0	5/59 (8.5%)	1/59 (1.7%)	3/59 (5.1%)	0	0
Both male and female	2/59 (3.4%)	6/59 (10.2%)	6/59 (10.2%)	8/59 (13.6%)	4/59 (6.8%)	1/59 (1.7%)
Male (only male + male & female)	2/59 (3.4%)	11/59 (18.6%)	7/59 (11.9%)	11/59 (18.6%)	4/59 (6.8%)	1/59 (1.7%)
Highest level of SEMIC**						
Only Level 1	0	3/64 (4.7%)	7/64 (10.9%)	5/64 (7.8%)	2/64 (3.1%)	1/64 (1.6%)
Level 2 and below	1/64 (1.6%)	3/64 (4.7%)	1/64 (1.6%)	1/64 (1.6%)	2/64 (3.1%)	0
Level 3 and below	0	2/64 (3.1%)	3/64 (4.7%)	3/64 (4.7%)	0	0
Level 4 and below	1/64 (1.6%)	9/64 (14.1%)	3/64 (4.7%)	5/64 (7.8%)	5/64 (7.8%)	0
Level 5 and below	1/64 (1.6%)	0	0	0	0	1/64 (1.6%)
Number of images and videos						
< 100	2/64 (3.1%)	9/64 (14.1%)	5/64 (7.8%)	6/64 (9.4%)	4/64 (6.3%)	0
101- 1,000	0	6/64 (9.4%)	3/64 (4.7%)	4/64 (6.3%)	3/64 (4.7%)	0
1,001- 10,000	1/64 (1.6%)	1/64 (1.6%)	3/64 (4.7%)	4/64 (6.3%)	3/64 (4.7%)	1/64 (1.6%)
>10,000	0	1/64 (1.6%)	4/64 (6.3%)	3/64 (4.7%)	0	1/64 (1.6%)

*** As a result of variability in the reports not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Table 4.3.3: Correlations between offending behaviour variables and demographic/offender belief variables

	Kendall's tau-b if 2x2 or Kendall's tau-c if 2x3 or more								
	Male children depicted	Age band of the youngest child depicted	Highest rated SEMIC	Number of images and videos	Where the SEMIC came from	Where the SEMIC was stored	Attempted to hide SEMIC	Distributed SEMIC	Produced SEMIC
Age band of the offender	0.019	N/A	0.007	0.162	0.047	0.205 *	0.060	0.017	0.035
Abused as child	-0.154	0.110	0.166	-0.115	0.148	0.107	-0.088	0.291	0.027
Educational attainment	0.010	-0.163	-0.049	0.202	0.005	0.107	-0.055	0.005	0.176
Relationship status	0.154	0.014	0.285 *	-0.187	0.022	0.012	0.066	0.236	0.143
Current sexual partner	0.116	0.000	-0.313	-0.021	-0.194	0.036	-0.183	-0.115	0.346 *
Has children under 18 YO	0.154	0.243	-0.346	-0.203	0.088	-0.362 *	0.027	-0.193	0.011
Access to children under 18 YO	-0.196	0.122	-0.230	-0.252	0.060	-0.313 #	-0.028	-0.224	-0.015
Socio-economic status	0.019	0.134	0.051	0.457 **	0.077	0.123	0.143	-0.110	0.121
Admitted guilt	0.490 **	0.000	0.038	0.088	-.077	0.329 #	-0.174	-0.186	0.271 *
Expressed remorse	-0.186	0.000	0.346 *	0.285 #	0.011	0.247 **	-0.168	0.070	0.070
Declared sexual interest in children	0.385 *	0.000	-0.154	0.159	0.077	0.230	0.006	-0.042	-0.271 *

*** = significant to <0.05; ** = significant to < 0.01; # = marginally significant (<0.07)**

Offenders' age in relation to whether or not they produced or distributed SEMIC

No relationships were found between the mean age of the offender and whether or not he distributed SEMIC (F 1,63)=0.166, p>0.05) or whether or not he produced SEMIC (F 1,63)=0.270, p>0.05). These means can be seen in Table 4.3.4.

Table 4.3.4: Mean age of offenders who produced and distributed SEMIC

	Mean Age of Offender (SD) N=80
Distributed SEMIC	35.89 (11.955)
Did not distribute SEMIC	37.23 (11.915)
Produced SEMIC	38.78 (17.971)
Did not produce SEMIC	36.55 (10.755)

Offender's childhood (whether or not he was abused) and education in relation to the size and deviancy of the offender's collection of SEMIC

The relationships between the size and deviancy of an offender's collection of SEMIC and whether or not he was abused as a child were tested. Offenders, who were abused as a child, might have larger collections of SEMIC and possess more deviant content. However, no relationship was found between the offender's childhood home and the size of his collection of SEMIC (Kendall's tau-c = -0.115, N=27, p>0.05). Similarly, no relationships were found between the offender's childhood home and how deviant his collection of images and videos were based on the three measures: sex of the children depicted (Kendall's tau-c = -0.154, N=25, p>0.05); age band of the youngest child victim (Kendall's tau-c = 0.110, N=25, p>0.05); and the highest rated image or video (Kendall's tau-c = 0.166, N=27, p>0.05). These distributions can be seen in Table 4.3.5.

Less educated offenders might have larger collections and more deviant content, because offenders who have spent more time collecting might fit well within the fixated typology (Groth, 1983) of contact offenders who target

children, who typically are less educated. However, no relationships were found between the highest educational level attained by the offender and the deviancy of this collection based on: the age band of the youngest child depicted (Kendall's tau-c = -0.163, N=25, p>0.05), the sex of the children depicted (Kendall's tau-c = -0.010, N=25, p>0.05), or the highest rated image or video (Kendall's tau-c = -0.049, N=27, p>0.05). No relationship was found between the size of the offender's collection and the highest level of education attained by the offender (Kendall's tau-c = 0.202, N=25, p>0.05). The distribution of these factors can be seen in Table 4.3.5.

Table 4.3.5: Frequencies of offenders based on childhood upbringing/education in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*					
	Family Background			Offender's highest level of education		
	Two parent home & no reported abuse	One parent home & no reported abuse	Abusive Home	School	College	University
Age of the youngest child depicted						
<3 Years Old	4/25 (16%)	1/25 (4%)	1/25 (4%)	4/25 (16%)	2/25 (8%)	0
Pre-pubescent (4-9 Years Old)	8/25 (32%)	3/25 (12%)	2/25 (8%)	10/25 (40%)	1/25 (4%)	2/25 (8%)
Early puberty (10-13 Years Old)	2/25 (8%)	0	4/25 (16%)	6/25 (24%)	0	0
Late puberty (14-17 Years Old)	0	0	0	0	0	0
Sex of the children depicted						
Only female	6/25 (24%)	1/25 (4%)	3/25 (12%)	8/25 (32%)	1/25 (4%)	1/25 (4%)
Only male	1/25 (4%)	0	0	1/25 (4%)	0	0
Both male and female	6/25 (24%)	3/25 (12%)	5/25 (20%)	11/25 (44%)	2/25 (8%)	1/25 (4%)
Male (only male + male & female)	7/25 (28%)	3/25 (12%)	5/25 (20%)	12/25 (48%)	2/25 (8%)	1/25 (4%)
Highest level of SEMIC**						
Only Level 1	4/27 (14.8%)	0	2 (7.4%)	5/27 (18.5%)	1/27 (3.7%)	0
Level 2 and below	0	1/27 (3.7%)	0	1/27 (3.7%)	0	0
Level 3 and below	4 /27 (14.8%)	2/27 (7.4%)	0	3/27 (11.1%)	2/27 (7.4%)	1/27 (3.7%)
Level 4 and below	4 /27 (14.8%)	0	4 (14.8%)	7/27 (25.9%)	0	1/27 (3.7%)
Level 5 and below	2/27 (7.4%)	2/27 (7.4%)	2 (7.4%)	5/27 (18.5%)	1/27 (3.7%)	0
Number of images and videos						
< 100	3/27 (11.1%)	2/27 (7.4%)	1/27 (3.7%)	6/27 (22.2%)	0	0
101- 1,000	3/27 (11.1%)	2/27 (7.4%)	1/27 (3.7%)	4/27 (14.8%)	2/27 (7.4%)	0
1,001- 10,000	4/27 (14.8%)	1/27 (3.7%)	2/27 (7.4%)	6/27 (22.2%)	1/27 (3.7%)	0
>10,000	4/27 (14.8%)	0	4/27 (14.8%)	5/27 (18.5%)	1/27 (3.7%)	2/27 (7.4%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Offender's childhood (educational level; whether or not he was abused) and whether or not the offender distributed or produced SEMIC

No relationships were found between whether or not the offender distributed SEMIC and the offender's childhood home (Kendall's tau-c = 0.291, N=27, p>0.05) or the highest level of education he attained (Kendall's tau-c = 0.005, N=27, p>0.05). Similarly, no relationships were found between whether or not the offender produced SEMIC and the offender's childhood home (Kendall's tau-c = 0.027, N=27, p>0.05) or the highest level of education the offender attained (Kendall's tau-c = 0.176, N=27, p>0.05). These distributions can be seen in Table 4.3.6. This is potentially an important finding relating to some of the assumptions made about contact offenders who target children and potential abuse they suffered as a child (see Chapter 2, sections 2.1.5, 2.2.2 and 2.3).

Table 4.3.6: Distribution of offenders based on their childhood upbringing and education attainment in relation to whether or not they produced or distributed SEMIC

	Number of Offenders (N=27)*			
	Distributed SEMIC	Did not distribute	Produced SEMIC	Did not produce
Family background				
Two parent home with no reported abuse	1 (3.7%)	13 (48.1%)	2 (7.4%)	12 (44.4%)
Single parent home with no reported abuse	3 (11.1%)	2 (7.4%)	1 (3.7%)	4 (14.8%)
Abusive home	0	8 (29.6%)	1 (3.7%)	7 (25.9%)
Offender's highest level of education				
School	3 (11.1%)	18 (66.7%)	2 (7.4%)	19 (70.4%)
College	1 (3.7%)	3 (11.1%)	1 (3.7%)	3 (11.1%)
University	0	2 (7.4%)	1 (3.7%)	1 (3.7%)

*** As a result of variability in the SER's not all values were reported for every offender**

Offender's relationship status and the size and deviancy of his collection of SEMIC

Offenders, who were single, could be more likely to have large collections of deviant material, as they would be less likely to be obtaining sexual gratification from a real life partner. The results seemed to corroborate that

assumption. A significant correlation showed that as the deviancy of the offenders' collections of SEMIC increased, based on the highest rated image or video, the likelihood that they were in a relationship decreased (Kendall's tau-c = -0.285, N=27, $p<0.05$). These distributions can be seen in Table 4.3.7.

No relationships were found between the offender's relationship status and the other two deviancy measures: the age band of the youngest child victim (Kendall's tau-c = 0.014, N=27, $p>0.05$) or the sex of the children depicted (Kendall's tau-c = 0.154, N=25, $p>0.05$). Similarly, no relationship was found between the size of the offender's collection and his relationship status (Kendall's tau-c = -0.187, N=27, $p>0.05$). These distributions can be seen in Table 4.3.7.

Table 4.3.7: Distribution of offenders based on their relationship status in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*			
	Single	**Married**	**Divorced**	**Living with a partner**
Age of the youngest child depicted				
<3 Years Old	3/25 (12%)	1/25 (4%)	2/25 (8%)	0
Pre-pubescent (4-9 Years Old)	4/25 (16%)	4/25 (16%)	2/25 (8%)	3/25 (12%)
Early puberty (10-13 Years Old)	2/25 (8%)	2/25 (12%)	1/25 (4%)	0
Late puberty (14-17 Years Old)	0	0	0	0
Sex of the children depicted				
Only female	2/25 (8%)	4/25 (16%)	2/25 (8%)	2/25 (8%)
Only male	1/25 (4%)	0	0	0
Both male and female	6/25 (24%)	4/25 (16%)	2/25 (8%)	2/25 (8%)
Male (only male + male & female)	7/25 (28%)	4/25 (16%)	2/25 (8%)	2/25 (8%)
Highest level of SEMIC*				
Only Level 1	1/27 (3.7%)	3/27 (11.1%)	1/27 (3.7%)	1/27 (3.7%)
Level 2 and below	0	0	0	1/27 (3.7%)
Level 3 and below	2/27 (7.4%)	1/27 (3.7%)	2/27 (7.4%)	1/27 (3.7%)
Level 4 and below	3/27 (11.1%)	3/27 (11.1%)	1/27 (3.7%)	1/27 (3.7%)
Level 5 and below	4/27 (14.8%)	1/27 (3.7%)	1/27 (3.7%)	0
Number of images and videos				
< 100	2/27 (7.4%)	1/27 (3.7%)	2/27 (7.4%)	1/27 (3.7%)
101- 1,000	2/27 (7.4%)	0	2/27 (7.4%)	2/27 (7.4%)
1,001- 10,000	3/27 (11.1%)	3/27 (11.1%)	0	1/27 (3.7%)
>10,000	3/27 (11.1%)	4/27 (14.8%)	1/27 (3.7%)	0

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

No relationships were found between whether or not the offender had a current sexual partner and the size of his collection (Kendall's tau-c = -0.021, N=24, p>0.05). There were also no relationships found between whether or not the offender had a current sexual partner and the deviancy of his collection based on: the age band of the youngest child depicted (Kendall's tau-c = 0.000, N=22, p>0.05), the sex of the children depicted (Kendall's tau-c = 0.116, N=22, p>0.05) and the highest rated image or video in his collection (Kendall's tau-c = -0.313, N=24, p>0.05). These distributions can be seen in Table 4.3.8.

Table 4.3.8: Distribution of offenders who had sexual partners in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*	
	Current sexual partner	**No current sexual partner**
Age of the youngest child depicted		
<3 Years Old	3/22 (13.6%)	2/22 (9.1%)
Pre-pubescent (4-9 Years Old)	8/22 (36.4%)	4/22 (18.2%)
Early puberty (10-13 Years Old)	3/22 (13.6%)	2/22 (9.1%)
Late puberty (14-17 Years Old)	0	0
Sex of the children depicted		
Only female	7/22 (31.8%)	3/22 (13.6%)
Only male	0	0
Both male and female	7/22 (31.8%)	5/22 (22.7%)
Male (only male + male & female)	7/22 (31.8%)	5/22 (22.7%)
Highest level of SEMIC*		
Only Level 1	5/24 (20.8%)	1/24 (4.2%)
Level 2 and below	1/24 (4.2%)	0
Level 3 and below	2/24 (8.3%)	2/24 (8.3%)
Level 4 and below	5/24 (20.8%)	3/24 (12.5%)
Level 5 and below	2/24 (8.3%)	3/24 (12.5%)
Number of images and videos		
< 100	4/24 (16.7%)	1/24 (4.2%)
101- 1,000	3/24 (12.5%)	3/24 (12.5%)
1,001- 10,000	3/24 (12.5%)	3/24 (12.5%)
>10,000	5/24 (20.8%)	2/24 (8.3%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Offender's relationship status and whether or not he distributed or produced SEMIC

Offender's, who were single, could be more likely to distribute or produce SEMIC, as they were likely not obtaining sexual gratification from a relationship. However, the opposite relationship was found. A significant correlation showed that offenders who produced SEMIC were more likely to have a current sexual partner (Kendall's tau-b = 0.346, N=24, $p<0.05$). These distributions can be seen in Table 4.3.9.

No relationships were found between the relationship status of an offender and whether or not he produced (Kendall's tau-c = 0.143, N=27, $p>0.05$) or distributed SEMIC (Kendall's tau-c = 0.236, N=27, $p>0.05$). A relationship was also not found between whether or not an offender had a current sexual partner and whether or not he distributed SEMIC (Kendall's tau-b = -0.115, N=24, $p>0.05$). The distribution of these factors can be seen in Table 4.3.9.

Table 4.3.9: Distribution of offenders who produced or distributed SEMIC in relation to their relationship status

	Number of Offenders n/N (%)*			
	Distributed SEMIC	Did not distribute	Produced SEMIC	Did not produce
Relationship Status				
Single	1/27 (3.7%)	9/27 (33.3%)	0	10/27 (37%)
Married	8/27 (29.6%)	8/27 (29.6%)	3/27 (11.1%)	5/27 (18.5%)
Divorced	4/27 (14.8%)	4/27 (14.8%)	0	5/27 (18.5%)
Living with a partner	2/27 (7.4%)	2/27 (7.4%)	1/27 (3.7%)	3/27 (11.1%)
Current Sexual Partner				
Yes	2/24 (8.3%)	13/24 (54.2%)	4/24 (16.7%)	11/24 (45.8%)
No	2/24 (8.3%)	7/24 (29.2%)	0	9/24 (37.5%)

*** As a result of variability in the SER's not all values were reported for every offender**

Offender's socio-economic status and the size and deviancy of his collection of SEMIC

A positive correlational relationship was found between the number of images and videos in an offender's collection of SEMIC, and his socio-economic status (Kendall's tau-c = 0.457, N=27, $p<0.01$). As seen in Table 4.3.10, the higher up on the socio-economic scale an offender was, the more likely the offender was to have a larger collection. The differences in the mean number of images and videos for the offenders based on their socio-economic status can be seen in Table 4.3.11. There was a large difference in the number of images and videos possessed between the offenders in the non-working class and the middle class offenders. However, these differences were not significant ($F_{4,22}=1.524$, $p>0.05$).

No relationships were found between the offender's socio-economic status and the deviancy of his collection of SEMIC based on: the age band of the youngest child victim (Kendall's tau-c = 0.134, N=25, $p>0.05$), the highest rated image or video in his collection (Kendall's tau-c = 0.051, N=27, $p>0.05$), or the sex of the children depicted (Kendall's tau-c = 0.019, N=25, $p>0.05$). These distributions can be seen in Table 4.3.10.

Table 4.3.10: Distribution of offenders based on their social classes in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*				
	Non-working class	Working class	Skilled working class	Lower middle class	Middle class
Age of the youngest child depicted					
<3 Years Old	2/25 (8%)	2/25 (8%)	0	1/25 (4%)	1/25 (4%)
Pre-pubescent (4-9 Years Old)	4/25 (16%)	4/25 (16%)	4/25 (16%)	0	1/25 (4%)
Early puberty (10-13 Years Old)	2/25 (8%)	0	1/25 (4%)	1/25 (4%)	2/25 (8%)
Late puberty (14-17 Years Old)	0	0	0	0	0
Sex of the children depicted					
Only female	4/25 (16%)	2/25 (8%)	2/25 (8%)	1/25 (4%)	1/25 (4%)
Only male	0	1/25 (4%)	0	0	0
Both male and female	6/25 (24%)	3/25 (12%)	2/25 (8%)	1/25 (4 %)	2/25 (8%)
Male (only male + male & female)	6/25 (24%)	4/25 (16%)	2/25 (8%)	1/25 (4%)	2/25 (8%)
Highest level of SEMIC**					
Only level 1	2/27 (7.4%)	2/27 (7.4%)	1/27 (3.7%)	1/27 (3.7%)	0
Level 2 and below	0	1/27 (3.7%)	0	0	0
Level 3 and below	2/27 (7.4%)	1/27 (3.7%)	1/27 (3.7%)	0	2/27 (7.4%)
Level 4 and below	5/27 (18.5%)	0	2/27 (7.4%)	0	1/27 (3.7%)
Level 5 and below	1/27 (3.7%)	2/27 (7.4%)	1/27 (3.7%)	1 (3.7%)	1/27 (3.7%)
Number of images and videos					
< 100	5/27 (18.5%)	1/27 (3.7%)	0	0	0
101- 1,000	2/27 (7.4%)	2/27 (7.4%)	1/27 (3.7%)	0	1/27 (3.7%)
1,001- 10,000	1/27 (3.7%)	3/27 (11.1%)	2/27 (7.4%)	0	1/27 (3.7%)
>10,000	2/27 (7.4%)	0	2/27 (7.4%)	2 (7.4%)	2/27 (7.4%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Table 4.3.11: Mean number of images and videos in relation to social class

	Mean number of images and videos (SD)
Non-working class	2,570 (4,849)
Working class	1,659 (1,918)
Skilled working class	48,671 (86,259)
Lower middle class	25,812 (17,900)
Middle class	13,833 (38,936)

Socio-economic status and whether or not the offender distributed or produced SEMIC

No relationship was found between the offender's socio-economic status and whether or not he distributed SEMIC (Kendall's tau-c = -0.110, N=27, $p>0.05$). Similarly, no relationship was found between whether or not an offender produced SEMIC and his socio-economic status (Kendall's tau-c = 0.121, N=27, $p>0.05$). The distribution of these factors can be seen in Table 4.3.12.

Table 4.3.12: Distribution of offenders based on their social class in relation to whether or not they produced or distributed SEMIC

	Number of Offenders (N=27)*			
	Distributed SEMIC	**Did not distribute**	**Produced SEMIC**	**Did not produce**
Non-working class	1 (3.7%)	9 (33.3%)	1 (3.7%)	9 (33.3%)
Working class	3 (11.1%)	3 (11.1%)	1 (3.7%)	5 (18.5%)
Skilled working class	0	5 (18.5%)	0	5 (18.5%)
Lower middle class	0	2 (7.4%)	1 (3.7%)	1 (3.7%)
Middle class	0	4 (14.8%)	1 (3.7%)	3 (11.1%)

*** As a result of variability in the SER's not all values were reported for every offender**

Offender's attitude about the crime and the size and deviancy of his collection of SEMIC

A significant correlation was found between the sex of the children depicted in the images and videos and whether or not an offender admitted guilt (Kendall's tau-b = 0.490, N=27, $p<0.01$). This correlation showed that offenders who were in possession of SEMIC that depicted male children (more deviant) were more likely to admit guilt than offenders who were in possession of SEMIC that only depicted female children (less deviant). These distributions can be seen in Table 4.3.13.

No relationships were found between whether or not the offender admitted guilt and the other two deviancy factors: the age band of the youngest child depicted (Kendall's tau-c = 0.000, N=25, $p>0.05$) or the highest rated image or video in his collection (Kendall's tau-c = 0.038, N=27, $p>0.05$). There was also not a relationship between the size of the offender's collection and whether or not he admitted guilt (Kendall's tau-c = 0.088, N=27, $p>0.05$). These distributions can be seen in Table 4.3.13.

Table 4.3.13: Distribution of offenders who admitted guilt in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*	
	Admitted guilt	**Did not admit guilt**
Age of the youngest child depicted		
<3 Years Old	5/25 (20%)	1/25 (4%)
Pre-pubescent (4-9 Years Old)	7/25 (28%)	6/25 (24%)
Early puberty (10-13 Years Old)	5/25 (20%)	1/25 (4%)
Late puberty (14-17 Years Old)	0	0
Sex of the children depicted		
Only female	4/25 (16%)	6/25 (24%)
Only male	0	1/25 (4%)
Both male and female	13/25 (52%)	1/25 (4%)
Male (only male + male & female)	13/25 (52%)	2/25 (8%)
Highest level of SEMIC**		
Only level 1	5/27 (18.5%)	1/27 (3.7%)
Level 2 and below	0	1/27 (3.7%)
Level 3 and below	4/27 (14.8%)	2/27 (7.4%)
Level 4 and below	5/27 (18.5%)	3/27 (11.1%)
Level 5 and below	5/27 (18.5%)	1/27 (3.7%)
Number of images and videos		
< 100	4/27 (14.8%)	2/27 (7.4%)
101- 1,000	5/27 (18.5%)	1/27 (3.7%)
1,001- 10,000	3/27 (11.1%)	4/27 (14.8%)
>10,000	7/27 (25.9%)	1/27 (3.7%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

A significant correlation was found between the highest rated image or video in an offender's collection and whether or not he expressed remorse (Kendall's tau-c = 0.346, N=27, $p<0.05$). This correlation showed that as the highest rated images and videos in the offender's collection got higher on the modified COPINE scale, the offenders were more likely to have expressed remorse. The distribution of offenders based on those characteristics can be seen in Table 4.3.14.

A marginally significant positive correlation was also found between the size of the offender's collection and whether or not he expressed remorse (Kendall's tau-c = 0.285, N=27, $p=0.066$). As seen in Table 4.3.14, the larger the offender's collection got, the more likely he was to have expressed remorse.

No relationships were found between whether or not the offender expressed remorse and the other two deviancy measures: the sex of the children (Kendall's tau-c = -0.186, N=25, p>0.05) and the age of the youngest child depicted (Kendall's tau-c = 0.000, N=25, p>0.05). The distribution of these factors can be seen in Table 4.3.14.

Table 4.3.14: Distribution of offenders who expressed remorse in relation to the quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*	
	Expressed remorse	**Did not express remorse**
Age of the youngest child depicted		
<3 Years Old	2/25 (8%)	4/25 (16%)
Pre-pubescent (4-9 Years Old)	0	13/25 (52%)
Early puberty (10-13 Years Old)	2/25 (8%)	4/25 (16%)
Late puberty (14-17 Years Old)	0	0
Sex of the children depicted		
Only female	1/25 (4%)	9/25 (36%)
Only male	0	1/25 (4%)
Both male and female	4/25 (16%)	10/25 (40%)
Male (only male + male & female)	4/25 (16%)	11/25 (44%)
Highest level of SEMIC**		
Only level 1	0	6/27 (22.2%)
Level 2 and below	0	1/27 (3.7%)
Level 3 and below	1/27 (3.7%)	5/27 (18.5%)
Level 4 and below	1/27 (3.7%)	7/27 (25.9%)
Level 5 and below	3/27 (11.1%)	3/27 (11.1%)
Number of images and videos		
< 100	0	6/27 (22.2%)
101- 1,000	1/27 (3.7%)	5/27 (18.5%)
1,001- 10,000	1/27 (3.7%)	6/27 (22.2%)
>10,000	3/27 (11.1%)	5/27 (18.5%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

A significant relationship was found between the sex of the children depicted and whether or not the offender declared a sexual attraction to children (Kendall's tau-b = 0.385, N=25, p<0.05). Offenders who were in possession of more deviant images and videos (depicting male children) were more likely to have declared a sexual attraction to children, as seen in Table

4.3.15. The implication to assessment and management for this finding will be discussed in Chapter 5, section 5.3.5.

However, no relationships were found between the other two deviancy factors: the age band of the youngest child depicted (Kendall's tau-c = 0.000, N=25, p>0.05) and the highest rated image or video (Kendall's tau-c = -0.154, N=27, p>0.05) when compared with whether or not an offender declared a sexual attraction to children. Similarly, no relationship was found between the size of the offender's collection and whether or not he expressed a sexual attraction to children (Kendall's tau-c = 0.159, N=27, p>0.05). These distributions can be seen in Table 4.3.15.

Table 4.3.15: Distribution of offenders who declared a sexual interest in children in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*	
	Declared sexual attraction to children	**Denied sexual attraction to children**
Age of the youngest child depicted		
<3 Years Old	3/25 (12%)	3/25 (12%)
Pre-pubescent (4-9 Years Old)	1/25 (4%)	12/25 (48%)
Early puberty (10-13 Years Old)	3/25 (12%)	3/25 (12%)
Late puberty (14-17 Years Old)	0	0
Sex of the children depicted		
Only female	1/25 (4%)	9/25 (36%)
Only male	0	1/25 (4%)
Both male and female	7/25 (28%)	7/25 (28%)
Male (only male + male & female)	7/25 (28%)	8/25 (32%)
Highest level of SEMIC**		
Only level 1	3/27 (11.1%)	3/27 (11.1%)
Level 2 and below	0	1/27 (3.7%)
Level 3 and below	2/27 (7.4%)	4/27 (14.8%)
Level 4 and below	1/27 (3.7%)	7/27 (25.9%)
Level 5 and below	2/27 (7.4%)	4/27 (14.8%)
Number of images and videos		
< 100	2/27 (7.4%)	4/27 (14.8%)
101- 1,000	1/27 (3.7%)	5/27 (18.5%)
1,001- 10,000	1/27 (3.7%)	6/27 (22.2%)
>10,000	4/27 (14.8%)	4/27 (14.8%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Offender's attitude about the crime and whether or not he attempted to hide any images or videos

No relationships were found between whether or not the offender attempted to hide any images or videos through encryption or other means when compared with his attitudes towards the crime: whether or not he admitted guilt (Kendall's tau-b = -0.174, N=27, p>0.05), whether or not he expressed remorse (Kendall's tau-b = -0.168, N=27, p>0.05) and whether or not he declared a sexual attraction to children (Kendall's tau-b = 0.006, N=27, p>0.05). These distributions can be seen in Table 4.3.16. The lack of relationship found here has a potential to impact upon the practice of criminal justice social workers in the assessment and management of internet sex offenders.

Table 4.3.16: Distribution of offenders who attempted to hide SEMIC in relation to their attitudes about the crime

	Number of Offenders (N= 27)*	
	Attempted to hide images or videos	Did not hide images or videos
Admitted guilt	6 (22.2%)	13 (48.1%)
Did not admit guilt	4 (14.8%)	4 (14.8%)
Expressed remorse	1 (3.7%)	4 (14.8%)
Did not express remorse	9 (33.3%)	13 (48.1%)
Declared sexual attraction to children	3 (11.1%)	5 (18.5%)
Denied sexual attraction to children	7 (25.9%)	12 (44.4%)

*** As a result of variability in the SER's not all values were reported for every offender**

Offender's attitude about the crime and whether or not he distributed or produced SEMIC

A significant positive correlation was found between whether or not an offender admitted guilt and whether or not he produced SEMIC (Kendall's tau-b

= 0.271, N=27, p<0.05). As seen in Table 4.3.17, the distributions show that offenders who produced SEMIC were more likely to admit guilt.

A significant positive correlation was also found when comparing whether or not and offender declared a sexual attraction to children and whether or not they produced SEMIC (Kendall's tau-b = -0.271, N=27, p<0.05). Offenders who produced SEMIC were less likely to have declared a sexual attraction to children, as seen in Table 4.3.17.

No relationships were found between whether or not an offender distributed SEMIC and the offender attitudes toward the crime when measured by: whether or not he admitted guilt (Kendall's tau-b = -0.186, N=27, p>0.05), whether or not he expressed remorse (Kendall's tau-b = 0.070, N=27, p>0.05) and whether or not he declared a sexual attraction to children (Kendall's tau-b = -0.042, N=27, p>0.05). Similarly, no relationship was found between whether or not the offenders expressed remorse and whether or not they produced SEMIC (Kendall's tau-b = 0.070, N=27, p>0.05). These distributions can be seen in Table 4.3.17.

Table 4.3.17: Distribution of offenders who produced or distributed SEMIC in relation to their attitudes about the crime

	Number of Offenders (N=27)*			
	Distributed SEMIC	**Did not distribute SEMIC**	**Produced SEMIC**	**Did not produce SEMIC**
Admitted guilt	2 (7.4%)	17 (63%)	4 (14.8%)	15 (55.6%)
Did not admit guilt	2 (7.4%)	6 (22.2%)	0	8 (29.6%)
Expressed remorse	1 (3.7%)	4 (14.8%)	1 (3.7%)	4 (14.8%)
Did not express remorse	3 (11.1%)	19 (70.4%)	3 (11.1%)	19 (70.4%)
Declared sexual attraction to children	1 (3.7%)	7 (25.9%)	0	8 (29.6%)
Denied sexual attraction to children	3 (11.1%)	16 (59.3%)	4 (14.8%)	15 (55.6%)

*** As a result of variability in the SER's not all values were reported for every offender**

4.3.2: Relationship between RM2000 and Stable/Acute 2007 scores and characteristics relating to offending behaviour

As described in Chapter 2, sections 2.2.2 and 2.3, risk assessments carried out in Scotland have a legal and practice based relevance to the management and determination of punishment of internet sex offenders. Also as discussed in Chapter 2, section 2.2.2, the accuracy and importance of the factors or characteristics used to determine risk with the RM2000 and Stable/Acute 2007 was questioned in relation to internet sex offenders. More specifically, it was suggested that the size and deviancy of an offender's collection of SEMIC might better relate to his sexual preoccupation and deviant sexual interests, than having stranger victims or non contact offences. This section reports on how those behavioural characteristics relate to the level of risk the criminal justice social workers classified these particular offenders as posing.

RM2000 score reported on the offender compared to the size and deviancy of his collection of SEMIC

A negative correlational relationship was found between the size of an offender's collection of SEMIC and the RM2000 score that was reported in the SER (Kendall's tau-c = -0.336, N=25, $p<0.05$). As seen in Table 4.3.18, as the level of risk went up, the size of the offender's collections went down. No relationships were found between the RM2000 score assigned to the offenders by the criminal justice social workers and the three deviancy measures: age of the youngest child depicted in an image or video (Kendall's tau-c = -0.074, N=23, $p>0.05$), the sex of the child victims (Kendall's tau-c = 0.057, N=23, $p>0.05$) and the highest rated image or video that he possessed (Kendall's tau-c = -0.273, N=23, $p>0.05$). The distributions based on these factors can be seen in Table 4.3.18.

Table 4.3.18: Distribution of offenders' RM2000 scores in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*		
	RM2000 low risk	**RM2000 medium risk**	**RM2000 high risk**
Age of the youngest child depicted			
<3 Years Old	1/23 (4.3%)	3/23 (13%)	2/23 (8.7%)
Pre-pubescent (4-9 Years Old)	4/23 (17.4%)	5/23 (21.5%)	3/23 (13%)
Early puberty (10-13 Years Old)	2/23 (8.7%)	1/23 (4.3%)	2/23 (8.7%)
Late puberty (14-17 Years Old)	0	0	0
Sex of the children depicted			
Only female	4/23 (17.4%)	6/23 (26.1%)	4/23 (17.4%)
Only male	0	0	1/23 (4.3%)
Both male and female	4/23 (17.4%)	6/23 (26.1%)	3/23 (13%)
Male (only male + male & female)	3/23 (13%)	3/23 (13%)	3/23 (13%)
Highest level of SEMIC**			
Only level 1	2/25 (8%)	0	3/25 (12%)
Level 2 and below	0	0	1/25 (4%)
Level 3 and below	1/25 (4%)	3/25 (12%)	1/25 (4%)
Level 4 and below	2/25 (8%)	5/25 (20%)	1/25 (4%)
Level 5 and below	3/25 (12%)	2/25 (8%)	1/25 (4%)
Number of images and videos			
< 100	0	2/25 (8%)	2/25 (8%)
101- 1,000	1/25 (4%)	2/25 (8%)	3/25 (12%)
1,001- 10,000	4/25 (16%)	2/25 (8%)	1/25 (4%)
>10,000	3/25 (12%)	4/25 (16%)	1/25 (4%)

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Stable/Acute score reported on the offender compared to the size and deviancy of his collection of SEMIC

No relationships were found between the Stable/Acute score assigned to the offenders and the three deviancy measures: age of the youngest child depicted in an image or video (Kendall's tau-c = -0.180, N=10, p>0.05), the sex of the child victims (Kendall's tau-c = -0.560, N=10, p>0.05) and the highest rated image or video that he possessed (Kendall's tau-c = -0.050, N=10, p>0.05). Similarly, no relationship was found between the size of the offender's collection and the risk level score on the Stable/Acute (Kendall's tau-c = -0.198, N=11, p>0.05). These distributions can be seen in Table 4.3.19.

Table 4.3.19: Distribution of offenders' Stable/Acute scores in relation to quantity and deviancy of SEMIC

	Number of Offenders n/N (%)*		
	Stable/Acute low risk	Stable/Acute medium risk	Stable/Acute high risk
Age of the youngest child depicted			
<3 Years Old	0	1/10 (10%)	1/10 (10%)
Pre-pubescent (4-9 Years Old)	3/10 (30%)	2/10 (20%)	2/10 (20%)
Early puberty (10-13 Years Old)	0	1/10 (10%)	0
Late puberty (14-17 Years Old)	0	0	0
Sex of the children depicted			
Only female	3/10 (30%)	1/10 (10%)	1/10 (10%)
Only male	0	0	0
Both male and female	0	3/10 (30%)	2/10 (20%)
Male (only male + male & female)	0	3/10 (30%)	2/10 (20%)
Highest level of SEMIC**			
Only level 1	0	1/11 (9.1%)	1/11 (9.1%)
Level 2 and below	1/11 (9.1%)	0	0
Level 3 and below	1/11 (9.1%)	0	1/11 (9.1%)
Level 4 and below	1/11 (9.1%)	0	1/11 (9.1%)
Level 5 and below	0	4/11 (36.4%)	0
Number of images and videos			
< 100	1/11 (9.1%)	0	0
101- 1,000	0	1/11 (9.1%)	3/11 (27.3%)
1,001- 10,000	2/11 (18.2%)	2/11 (18.2%)	0
>10,000	0	2/11 (18.2%)	0

*** As a result of variability in the SER's not all values were reported for every offender; **Level of SEMIC based on the modified COPINE scale as rated by the police forensic unit**

Risk score and whether or not the offender produced or distributed SEMIC

No relationships were found between the level of risk the offender was rated on the RM2000 when compared by whether or not he distributed SEMIC (Kendall's tau-c = 0.243, N=25, p>0.05) or produced SEMIC (Kendall's tau-c = -0.205, N=25, p>0.05). Similarly no relationships were found whether or not the offender distributed SEMIC (Kendall's tau-c = 0.00, N=11, p>0.05) or produced SEMIC (Kendall's tau-c = 0.00, N=11, p>0.05) and the risk rating assigned based on the Stable/Acute. These distributions can be seen in Table 4.3.20.

Table 4.3.20: Distribution of offenders who distributed or produced SEMIC in relation to RM2000 and Stable/Acute ratings

	Number of Offenders (N=25)*			
	Distributed SEMIC	Did not distribute SEMIC	Produced SEMIC	Did not produce SEMIC
RM2000 risk level				
Low risk	0	8 (32%)	2 (8%)	6 (24%)
Medium risk	2 (8%)	8 (32%)	2 (8%)	8 (32%)
High risk	2 (8%)	5 (20%)	0	7 (28%)
Stable/Acute risk level				
Low risk	1 (9.1%)	2 (18.2%)	0	3 (27.3%)
Medium risk	1 (9.1%)	4 (36.4%)	2 (18.2%)	3 (27.3%)
High risk	1 (9.1%)	2 (18.2%)	0	3 (27.3%)

*** As a result of variability in the SER's not all values were reported for every offender**

4.3.3: Management recommendations

As seen in Table 4.3.21, the same three management recommendations were made for all of the offenders.

Table 4.3.21: Distribution of offenders based on management recommendations

	Number of Offenders (N=30)
No unsupervised access to children under 18	30 (100%)
No use of the internet	30 (100%)
No use of technology capable of taking or modifying an image	30 (100%)

4.4: Summary of results

The main aim of this thesis was to determine what information criminal justice social workers and the police in Scotland were routinely collecting on internet sex offenders and to determine how that information might inform any risk assessment and management decisions made. This was accomplished by assessing the routinely collected information for any distinctions that could be

made between different internet sex offenders and overlaid within the context of the extensive literature relating to what factors increase the likelihood contact sex offenders who target children will recidivate which will be discussed in greater detail in the next chapter.

The information routinely collected by the criminal justice social workers and the police in Scotland provide several characteristics that are useful in making distinctions between different internet sex offenders. Generally, the police forensic reports described information related to the offending behaviour of internet sex offenders. The characteristics that were reported on can be seen in Table 4.4.1.

Table 4.4.1: Characteristics reported on by the police

Year the crime was committed	Was the offender distributing	Number of images and videos
Where the SEMIC came from	Was the offender producing	Sex of the children depicted
Where the SEMIC was stored	Offending history	Age of the children depicted
Did the offender use encryption		Modified COPINE ratings

The SERs generally focused on information related to characteristics that described the offender's demographics and attitudes he held in relation to the crime. The characteristics that were reported on can be seen in Table 4.4.2.

Table 4.4.2: Characteristics reported on by the criminal justice social workers

Age of the offender	Socio-economic status	Admitted guilt
Offender's childhood	Access to children	Expressed remorse
Education attainment	Relationship status	Declared sexual attraction to children
Risk assessment	Management recommendations	

However, it is still not known which characteristics are most important or hold the most weight when making distinctions related to risk assessment of internet sex offenders. Exploratory correlational analysis of the relationships between several of the characteristics within the subsets was reported on. These tests were conducted as a way to further conceptualize this sample of

internet sex offenders within the context of the characteristics known to increase recidivism risk in contact offenders who target children. The results showed a correlation between the three potential deviancy measures (sex and age of the children depicted and severity of the image or video) suggesting that offenders who possessed the most deviant images or videos based on one of those measures also likely possessed the most deviant SEMIC on the other two measures as well. The results also showed a correlation between the size and deviancy of an offender's collection suggesting that as the size of an offenders collection of SEMIC got larger, the likelihood that he also possessed the most deviant images and videos (based on three deviancy measures) also increased. The results also showed a correlation between the age of the offender and how deviant his collection of SEMIC was, suggesting that as the age of the offender increased, the likelihood that his collection of SEMIC would be on the more deviant end also increased. A correlation was also found between the relationship status of an offender and whether or not he was a producer, suggesting that offenders who were in relationships were more likely to be producers of SEMIC than offenders who were single. The results also indicated that as the deviancy of an offender's collection of SEMIC increased, so did the likelihood that he was not in a relationship.

How these characteristics and relationships relate to the literature, as well as the implications of these findings to the assessment of risk and management of internet sex offenders, are discussed in greater detail in the next chapter.

Chapter 5: Discussion

The main aim of this thesis was to assess the information that was routinely collected by criminal justice social workers and the police in Scotland on internet sex offenders in relation to how that might affect decisions related to management and the assessment of risk to reoffend. As discussed in Chapter 2, one of the recurring themes of this thesis is that the literature and knowledge about internet sex offenders is borne out of the understanding of contact sexual offenders that target children. This has led many, in both practice and research, to assess and manage internet sex offenders identically or similarly to contact offenders who target children (see Chapter 2, sections 2.1, 2.2.2 and 2.3), working under the assumption that they are the same offenders only at different stages of their offending careers. This thesis has also argued that the law (see Chapter 2, section 2.1.2), sentencing guidelines used in England and Wales (Chapter 2, section 2.1.3), and current literature and research suggests that they are not only different from contact offenders who target children, but that internet sex offenders are not a homogeneous group of offenders in themselves. Distinctions can be made between internet sex offenders based on their demographic characteristics (Chapter 2, section 2.1.5), characteristics that describe their offending behaviour (Chapter 2, section 2.1.4) and potentially even based on the level of risk they pose to reoffend, all of which may have implications for risk assessment and management.

This chapter is divided into several sections. The first two sections discuss the information that was routinely collected by the criminal justice social workers and the police and how those findings related to current literature as well as how they might relate to the assessment of risk or affect management decisions. One of the main finding of this thesis was the information routinely collected and reported on in the social enquiry reports (SERs) by the criminal justice social workers related almost exclusively to characteristics that described the offenders' demographics. Based on those

characteristics, this sample of offenders appeared similar to what has been noted about internet sex offenders in previous studies (Bates & Metcalf, 2007; Faust et al., 2014; Long et al., 2012; Seto et al., 2010; Wolak et al., 2011). These offenders appeared to be older, slightly more educated and come from more of a variety of social classes than contact offenders who target children. These offenders also seemed to be more remorseful and were more likely to admit guilt than contact offenders who target children.

While the police routinely collected more detailed information, it was found that the police forensic reports were almost exclusively related to the characteristics that described the offending behaviour of internet sex offenders. The characteristics reported on were similar to other studies and suggest that this sample of offenders was similar to what other researchers have found in terms of where the offenders where obtaining their SEMIC, the proportion of offenders distributing or producing images or videos and the size and deviancy of their collections (Long et al., 2012; Seto et al., 2010; Wolak et al., 2011). The main findings also seem to indicate that there was a relationship between two of the variables that were used to determine the deviancy of the SEMIC; the offenders in possession of SEMIC depicting very young children were also likely to be in possession of SEMIC depicting penetration or sadistic acts. A relationship was also found between the deviancy of the offender's collection in relation to its size on a couple of factors. As the number of images or videos possessed by the offenders increased, so did the likelihood they would have possessed SEMIC depicting very young children, boys or penetrative/sadistic acts. This is potentially an important finding in relation to an offender's likelihood to recidivate as several meta-analyses have found increased sexual preoccupation and deviant sexual interests to increase sexual offenders' likelihood to recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009).

The third section of this chapter discusses the post-hoc analysis of how the characteristics relating to offender demographics were associated with characteristics describing offending behaviour. These relationships are discussed in the context of risk assessment and decisions related to

management. Several of the findings add weight to the claim by Sullivan and Beech (2004) that internet sex offenders become desensitised to the material they were using and seek out more deviant content to obtain the same level of arousal as before (see Chapter 2, section 2.1.3), escalating their offending behaviour. The findings also suggest a disconnect between the level of risk the criminal justice social workers rated the offenders, using standardized assessments, and the size and deviancy of the offender's collection of SEMIC. The results showed that as the size and deviancy of the offender's collection went up, the likelihood he would be rated a high risk to reoffend went down. This is at odds with the theory and evidence of recidivism in contact offenders who target children (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009; Thornton, 2002; Thornton et al., 2003) as the offenders with the largest collections likely have the highest sexual preoccupation, a factor found to increase the likelihood of recidivism.

The last section summarizes the implications of this research to risk assessment and management of internet sex offenders and provides some suggestions for criminal justice social workers. The limitations of this research are also discussed in greater detail.

5.1: Criminal justice social work routinely collected data

One of the key findings of this thesis was that criminal justice social workers in Scotland appear to base their assessment of risk and management recommendations of internet sex offenders largely on demographic characteristics, along with attitudes the offender might have held about the crime. This was not unexpected; the social enquiry reports (SERs) are standardized and used for offenders convicted of any crime, not just sexual offences. From a theoretical point of view, Bartol (2002) argues that social circumstances and demographic characteristics are important in determining the most appropriate sentence. Similarly, the guidance for the social enquiry reports provided by the Scottish Government (2004) weighed heavily on

demographic characteristics for measuring the suitability of different management options such as incarceration, fines and restitution.

As discussed in Chapter 2, section 2.3.3, attitudes the offender had towards the crime have been found to be important in determining the suitability of treatment; for example offenders who fail to admit guilt for committing a sex crime have been found to be unlikely to complete treatment (Hunter & Figueredo, 1999; Levenson, 2011; Levenson & Macgowan, 2004; Schneider & Wright, 2001). While this has not been evidenced by research (Hanson & Morton-Bourgon, 2005), practice still expects there to be a link between risk to reoffend and the lack of guilt or remorse, suggesting that offenders who fail to admit guilt or feel remorse are more likely to reoffend. These are possible reasons why criminal justice social workers found it important to collect this information on internet sex offenders when making recommendations related to risk and management.

The characteristics reported on by the criminal justice social workers in the SERs on this sample of internet sex offenders, how some of those characteristics relate to each other and how those finding could inform the offenders' risk to reoffend and management are discussed below.

5.1.1: Age of the offender when crime committed

The age of the offender at the time they committed the offence has proven to be an important predictor in terms of how likely they are to recidivate. Several recidivism studies have shown that the younger a sex offender is when he commits the crime, the higher the likelihood that he will reoffend (Janka, Gallasch-Nemitz, Biedermann, & Dahle, 2012; Langton et al., 2007; Seto, 2013), a notion supported by an older meta-analysis of 61 studies by Hanson and Bussière (1998). In a limited scale, this has also been shown to be true of internet sex offenders (Wakeling, Howard, & Barnett, 2011).

The age range of the internet sex offenders sampled in this thesis was 18 to 69 years of age, where both the mean and the median age was 37 years old (N=64; SD=11.9). This was older than the mean age of all criminals in Scotland in 2008/09 based on the age of the offenders identified in all the SERs

submitted to the courts that year, which was 28 years old (Morton, 2010). This was also substantially older than the mean and median age reported by the US government for sexual offences (excluding forcible rape and prostitution) in 2009, which was 19 years old (Justice, 2009). There was no data available for Scotland during that time period specifically listing the average age of sexual offenders.

Seto et al. (2010) reported that the mean age of internet sex offenders in their police sample was 37.6 (N=50; SD=12) and 33.8 (N=34; SD=11.2) in their clinical sample, which was closer to the age found in this sample. This sample was also similar to what was found by Elliott, Beech, and Mandeville-Norden (2013) where they reported in a case file review the mean age of their internet sex offender sample as 40 years old, Long et al. (2012) where they reported their mean age being 42 years old and Lee, Li, Lamade, Schuler, and Prentky (2012) where they found the mean age in their sample of Internet only as well as internet and contact offenders to both be 41 years old.

It could be argued that the difference in the average age between general sex offenders and internet sex offenders suggests that they may be two separate offender groups. This would have potential implications for the assessment of risk. Research into the practice of Scottish criminal justice social workers as well as the guidance provided by the Scottish Government (Davidson, 2007) suggests practitioners assess internet sex offenders in the same way as contact offenders who target children utilising actuarial risk assessment tools (specifically the RM2000 and the Stable/Acute 2007). However, both of these tools were created and validated specifically on an incarcerated group of contact sexual offenders (Hanson et al., 2007; Thornton et al., 2003). The meta-analyses of over 70 samples of contact offenders that informed the creation of these tools (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005) identified the age of the offender as an important factor in determining an offender's risk to reoffend with younger offenders being considered a higher risk to reoffend. If the same actuarial risk assessment tools were used on both internet and contact sex offenders, the potential higher average age of internet sex offenders, in comparison to contact offenders, lends itself to the notion that

internet sex offenders might be a lower risk to reoffend. More longitudinal research, however, would be needed to assess whether the difference in age between general sex offenders and internet sex offenders significantly affects their predicted risk to reoffend.

One research group, however, which does use longitudinal data, suggests the age of internet offenders is getting younger. Wolak and Finkelhor (2013) found that there were significantly more 18 to 25 year olds in their 2009 sample of internet sex offenders in comparison to their 2006 sample which was even more than their 2000 sample. While not significant and a fairly small sample size (N=65), my study would suggest the opposite. The mean age for the offenders in 2002 was 35 years old, whereas the mean age of the offenders in 2009 was 42 years old. More research is needed to identify whether the Wolak and Finkelhor (2013) findings are generalizable to all internet sex offenders, or if the trend is unique to their data. More research is also needed to determine how any potential shift in the age of internet sex offenders might affect the predictive validity of age for internet sex crime recidivism.

The age of the offender when the crime was committed did not appear to have an impact on the management recommendations the criminal justice social workers suggested to the courts. Due to the average age of the offenders in this sample, this was not unexpected. Should the offender have been very young or elderly, management suggestions incorporating incarceration or hefty financial penalties might not have been appropriate.

The relationship between age of the offender when he committed the crime and some of the characteristics that can describe his offending behaviour (such as the age of the children depicted the SEMIC he possessed) is discussed in the Section 5.3.1.

5.1.2: Attitudes toward the crime

The criminal justice social workers also demonstrated an interest in the attitudes and beliefs that the offenders held after they were convicted of committing an internet sex related crime. Those attitudes and beliefs (whether or not the offender admitted guilt, expressed remorse or empathy, and declared

a sexual interest in children) appeared to guide the social workers' decisions on what to recommend in terms of sentencing as well as what type of treatment and management plans would be most effective. The criminal justice social workers appeared to make distinctions between this group of internet sex offenders based on these attitudes and beliefs.

Admission of Guilt

Whether or not the offender admitted guilt appeared to be an important characteristic for criminal justice social workers as it was discussed in every SER. In this sample, the vast majority of offenders (70%) admitted to committing the crime, whereas only 30% were adamant that they were innocent. This was similar to what Seto et al. (2010) found, as in both of their samples the vast majority (86% and 91%) of the offenders admitted guilt. While there has been very little research directly comparing internet sex offenders to contact offenders, looking specifically at guilt/denial, this finding appears to be very different from what studies have shown in terms of the prevalence of denial in contact offenders, where a large proportion seem to deny any involvement with the crime (Cooper, 2005; Kennedy & Grubin, 1992; Nugent & Kroner, 1996). This could be an important distinction to make between contact sex offenders who target children and purely internet sex offenders with no contact offence history, and it needs to be investigated further.

While it was beyond the scope of this study to investigate why internet sex offenders appeared to admit guilt more readily than contact offenders who target children, there could be several reasons for this difference. One possibility could relate to the availability of evidence. Proving an offender possessed SEMIC (i.e. illegal images or videos were found on his computer) is more forensically straightforward than proving an offender sexually assaulted a child (Seto, 2013).

Admitting to what they had done could have had multiple implications; one significant one being that it could have affected how lenient the judge might have been in sentencing (GOV.UK, 2013; McGarraugh, 2013). This thesis did not assess what sentences were imposed, however, so it is not known whether or

not admitting guilt related to more lenient sentences for this particular group of internet sex offenders. Practice also seems to suggest that it should affect the risk an offender poses to reoffend (Nunes et al., 2007; Service, 2011b). However, admission of guilt has not been found to be associated with a decreased level of risk to reoffend (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). Admission of guilt might be an important factor in determining what management options are most suitable for the offender and more specifically whether or not an offender is suitable for treatment (Service, 2011a). Offenders who fail to complete treatment appear to be at an elevated risk to recidivate, so denial could have an indirect relationship to risk of recidivism (Hanson & Morton-Bourgon, 2009).

While the majority of the internet sex offenders admit guilt, which was also seen in the present sample, a strong association has not been found between denial and risk to recidivate. Understanding the possible reasons as to why some offenders were still insisting innocence could potentially be important in the management of those few offenders. This thesis explored the possible relationships between admission of guilt and the other demographic characteristics reported on these offenders by criminal justice social workers. The only significant relationship found was the admission of guilt and age. This correlation suggests that as the age of the offender went up, the more likely they were to admit guilt. The importance or significance of this is undetermined. No studies have been found suggesting a similar trend in other samples of internet sex offenders. One possible explanation could relate to the age of the offender in relation to the age of the children depicted in the SEMIC. Perhaps the offenders that denied guilt were in possession of mostly SEMIC depicting older children. This could then possibly constitute as age appropriate sexual attraction/interest.

Remorse

Understanding whether or not an offender was remorseful for what they had done was also a characteristic reported on in the SERs by the criminal justice social workers. This factor also had potential implications for sentencing

(Ward, 2006) as well as how they were managed and treated by the criminal justice social workers. As previously discussed, sexual offenders that lack remorse or empathy for their victims are thought to be much harder to treat (Pollock & Hashmall, 1991) and the practice of criminal justice social workers suggests that they are thought to be a higher risk to reoffend (Service, 2011a, 2011b) even though meta-analyses have shown that remorse is not associated with elevated risk to recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005).

Unexpectedly, the vast majority (82%) of offenders in this sample admitted no remorse for what they had done, while only 18% admitted to being remorseful. This suggested that vast majority did not acknowledge that what they did was wrong. When this was compared with the offenders that admitted guilt, a strong correlational effect was found (Kendall's tau-c = 0.219, N=27, p=0.017) with all five of the offenders that admitted to being remorseful also admitted to being guilty. This suggests that for those five offenders, they knew what they did was wrong and they felt sorry about it. However, more interestingly, there were fourteen offenders that admitted to being guilty but did not express any remorse. This suggests that they admitted to what they were accused of doing, but did not think it was wrong. It would be worthwhile to investigate this further and to identify the psychological factors or attitudes at work. If there is a commonality, the psychological factors behind those attitudes might make those offenders a bigger risk to reoffend or even harder to treat.

Declared sexual interest in children

The third attitude towards the crime that criminal justice social workers reported on in every SER was whether or not the offender admitted to having sexual interest in children. In this sample, just under a third (30%) of the offenders admitted to being sexually attracted to children, whereas the vast majority (70%) did not. This was very similar to what Seto et al. (2010) found in both their police sample (46%) and their clinical sample (38%) admitting to being sexually attracted to children. This distinction is potentially very

important for the management of these offenders as Lanning (1992) and Seto et al. (2010) suggest very different interventions are needed for offenders who use or collect SEMIC as part of their contact offending or offenders who use SEMIC as a masturbatory aide for their sexual attraction to children, in contrast to offenders who collect SEMIC because it is different or taboo or those that who collect SEMIC it out of curiosity. Those offenders who express a sexual interest in children are potentially a higher risk to reoffend, as deviant sexual interests have been shown to be the strongest predictor of recidivism in sexual offenders (Hanson & Bussière, 1998).

It is important to note however, this was a self-reported declaration of sexual interest in children. It is likely those offenders that admitted to being sexually attracted to children actually were, but it is highly probable that a large percentage of the offenders who claimed they were not sexually attracted to the children in the SEMIC they possessed actually were. Seto et al. (2006) found based on phallometric assessment that offenders who possessed sexually explicit images depicting children were more likely to show sexual arousal when exposed to that same stimuli than contact offenders who target children. This led them to claim that possession of SEMIC is an accurate predictor of paedophilia.

The offenders in this sample who denied being sexually attracted to children, but in actuality were could have denied their sexual attraction for several reasons. They might not yet have come to terms with their deviant sexual attraction to children and were psychologically prevented from admitting this attraction to themselves or to others. These psychological barriers could be similar to those experienced by people facing other sexual identity issues (Grov, Bimbi, Nanín, & Parsons, 2006). These offenders might have also denied sexual attraction to children as a way to gain leniency for sentencing.

Just admitting to having a sexual attraction to children may not be enough to warrant action or a change in management strategy however. It may be important to question whether the offenders that say they have a sexual interest in children actually have access to children as well as question whether

or not they have a history of contact offending. The results of this study seem to support that notion, as there was no correlation found between offenders who had access to children and those who had a declared sexual interest in children (Kendall's tau-b = -0.024, N=27, p>0.05). However, it did not appear as though the criminal justice social workers took either of those factors into consideration, as their management strategy appeared to be the same for all of the internet sex offenders: prohibit access to children under the age of 18. As discussed in Chapter 2, section 2.3, this practice may be overly restrictive. However these recommendations and actions are similar to those described by Berlin and Sawyer (2012) about a sample of internet sex offenders in the United States.

The relationship between whether or not an offender declared a sexual interest in children and whether or not he admitted guilt or expressed remorse might similarly be just as important to the management and assessment of internet sex offenders. A correlation was found between whether or not the offender declared a sexual interest in children and whether or not they admitted being guilty (Kendall's tau-c = 0.351, N=27, p=0.002), suggesting that offenders who admitted to being guilty were more likely to also declare a sexual interest in children. The distributions show that all of the offenders that admitted to having a sexual interest in children also admitted to being guilty of possession, which was an anticipated association. Interestingly, however, eleven offenders admitted to being guilty of being in possession of SEMIC, but at the same time claimed that they were not sexually attracted to children. As already mentioned, some caution needs to be taken when accepting the self-reporting nature of those claiming to not being sexually attracted to the children in the images they possessed. However, one possible explanation could be that these offenders might not have been downloading the material for sexual gratification but rather as a result of an obsessive or compulsive tendency. They could have had the "need" to finish a collection that they started, similarly to how stamp collectors strive to get the best and rarest stamps. In this instance, these collections could have started more out of a curiosity than out of a sexual need or interest. This non-sexual collecting behaviour has been

reported by others (Berlin & Sawyer, 2012; Marshall, O'Brien, Marshall, Booth, & Davis, 2012) when researching internet sex offenders, however with small sample sizes. Should these offenders not actually have a sexual interest in children, they might be a lower risk to reoffend.

A correlational relationship was also found between whether the offenders admitted to being sexually attracted to children and whether the offender expressed remorse (Kendall's tau-c = 0.373, N=27, p=0.025). The results suggested offenders who did admit to being sexually attracted to children were also not likely to have expressed remorse. This was an expected response, as if the offenders did not claim to be sexually attracted to the children depicted in the images or videos, why would they feel remorseful about being in possession of that media.

The offenders who fell within the converse relationship, however, might require more attention in relation to their management and assessment. Out of the eight offenders that declared their sexual interest in children, four offenders did not express remorse. This is an important distinction to make, as these offenders admitted to being sexually attracted to children but at the same time were not remorseful about that. This could be a psychopathic tendency, as Perri (2011) argues that psychopaths are usually classified as having an inability to empathise with others and show a lack of remorse for what they had done. Porter, Brinke, and Wilson (2009) found that contact offenders who target children were significantly higher in psychopathic tendencies than other sexual offenders. Given the relatively small number of internet sex offenders that this seems to apply to, at least in this sample, this suggests another possible difference between contact sex offenders who target children and internet offenders. Similarly, while these attitudes have not been related to increased risk to recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009), these will likely be issues that need to be addressed in treatment for the proper management of these offenders. More research is needed to determine if this is a sub-group of internet sex offenders and whether or not having high psychopathic tendencies really describes them.

5.1.3: Family and relationship status

Stable Relationship

Having a stable relationship, with an age appropriate partner, was another characteristic discussed in the social enquiry reports conducted by the criminal justice social workers. In this sample, 37% of the offenders were single, whereas 30% were married, 6% were divorced and 5% were living with a partner. These results are similar to the general population of Scotland based on the 2011 census (National Records of Scotland, 2013). Long et al. (2012) reported similar results in their sample with 30% of their offenders being single. Other studies seemed to have reported much larger proportions of single offenders in their samples of internet sex offenders. Wolak et al. (2011) found 62% of the offenders in their 2000 sample and 69% of the offenders in their 2006 sample were single and Webb et al. (2007) reported that 56% of their sample of internet sex offenders were single.

As discussed in Chapter 2, sections 2.2.2 and 2.3, relationship stability is important for both the assessment of risk as well as the management of sex offenders. Hanson and Morton-Bourgon (2005, 2009) found, in their meta-analyses, that sex offenders who have never been in a long-term stable relationship are at an increased risk to reoffend. Similarly, they also found that currently being in a stable relationship lowers the likelihood a sex offender will recidivate. While the meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) were assessing studies conducted on contact sex offenders, there is no research to suggest that the same characteristics would not be important in the assessment of risk for internet sex offenders (Seto, 2013).

The relationship status of an offender can be important for his management as well. Treatment programmes, like the Good Lives Programme used in Scotland, specifically target dynamic factors that are associated with risk to reoffend (Service, 2011a, 2011b). The reasons why an offender might be single could be many. However, if it has to do with emotional or psychological deficits (such as depression), treatment programmes can address those issues.

Similarly, if an offender expresses emotional congruence with children as opposed to adults, this can also be addressed in treatment programmes (Salter, 1988).

Access to children

Whether or not an offender had minor children or access to minor children appeared to be of interest to criminal justice social workers. Each SER discussed this topic in depth, with some dedicating a large portion of the report to this topic. In this sample, 48% of the offenders had minor children and 52% had access to minor children. This was similar to what Long et al. (2012) found in their sample, with 64% of their internet sex offenders having access to children, as well as what Wolak et al. (2011) found in both their 2000 and 2006 sample with roughly half of the offenders in both groups having access to children.

Having access to children has not specifically been found to be a risk factor for sex offenders to recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). However, these factors were calculated utilizing a sample of general sex offenders, not only contact sex offenders who target children. Babchishin, Hanson, and VanZuylen (2014) found in their meta-analysis of 30 studies that contact offenders who target children were more likely to have had access to children than internet sex offenders. However, they also found that internet sex offenders had greater psychological barriers (victim empathy) than contact offenders who target children and mixed offenders (both internet and contact). This suggests that having access to children could be a risk factor for an offender who has a history of contact offences and has a sexual interest in children, but that it might not be as great a risk for offenders who only have a history of collecting SEMIC. These SERs did not, however, seem to take that into consideration when making their recommendations for management.

As discussed in Chapter 2, section 2.3, there is a history of internet sex offenders being prohibited from having contact with any children under the age of 18 years old, which means removal of children from the home. The SERs

describing this sample of offenders were no different. Each report recommended that the offender have no unsupervised contact with children under the age of 18 years old. This appears to be based on the assumption that all internet sex offenders are at risk of committing contact offenses against the children in their vicinity, even those individuals who, have no history of contact offences. This was not unexpected, given the SERs failed to take into account any of the behavioural characteristics that can describe these offenders and even make distinctions between them. This is a contentious topic (Seto, 2013) and will be discussed further. The removal of children is potentially an overly protective move that is putting undue stress on the families and the children that have been removed (Comfort, Nurse, McKay, & Kramer, 2011; Feng, Chen, Fetzer, Feng, & Lin, 2012).

This thesis had also hoped to explore any relationships between the age and sex of the offender's children and the age and sex of the children depicted in his collection of SEMIC. However, due to a lack of ages and sex listed in the SERs and the way the same characteristic information was reported on by the police in the forensic reports, this was not possible. This is still worthy of further research.

5.1.4: Offender's childhood

Abusive childhood

Assessment of the offender's childhood frequently emerged in the SERs as a reported characteristic by the criminal justice social workers. In this sample, most of the offenders came from a two parent home where no abuse was reported (52%), followed by 30% that came from an abusive home and 18% that came from a single parent home where no abuse was reported. The third of the offenders that came from an abusive family is considerably higher than the estimated 11% of males that experience childhood sexual abuse in Scotland ("Survivors of childhood sexual abuse," 2011). However, this proportion of internet sex offenders that came from an abusive home is similar to what Babchishin et al. (2011) reported in their meta-analysis of 27 studies.

They found that 24% of the internet sex offenders experienced childhood physical abuse and 21% of them experienced childhood sexual abuse, which they claimed was significantly more than among adult males in the general population.

Bartol (2002) argues that having had an unstable or abusive childhood is often listed as one of the key factors in why offenders commit crimes. Given that it was heavily reported on in the SER's, one could expect this characteristic to be important to how the offenders were assessed in terms of risk to recidivate or affect the recommendations given for management options. However, as reported by Hanson and Bussière (1998), in their meta-analysis, experiencing sexual abuse as a child does not correlate with elevated risk to reoffend. This suggests the offenders having a history of being abused as a child should not have impacted on how the practitioners assessed their risk to reoffend, and it did not appear to.

Beckett (1994) argues that knowing whether or not an offender was abused as a child is important for treatment programmes. However, no direct correlation has been found between offenders who have been abused and successful completion of a programme (Beckett, 1994). Similarly, no studies were found that suggest a link between the successful implementation of management options and whether or not the offender was abused as a child. This suggests the only plausible reason to comment on this characteristic in the social enquiry reports would be to imply or suggest a reason as to why the offender acted the way he did in an attempt to affect the sentences imposed. Offender childhood abuse, however, is of little direct importance to the management and assessment of this group of offenders.

Educational background

The educational background of internet sex offenders was also a characteristic that was reported on by criminal justice socials workers in the SERs. This practice possibly relates to the assumption that psychometric scores of intelligence (such as IQ and SAT scores) are correlated with one's likelihood of becoming a criminal (Bartol, 2002) and the assumption that one's intelligence

is tangibly measured by the highest level of education obtained. More specifically, there is an assumption that those with the highest psychometric score have the highest levels of education and as a result have the lowest likelihood of being a criminal. Conversely, the opposite is also thought to be true with those having the lowest psychometric intelligence having obtained the lowest educational level and also having highest likelihood of being a criminal (Crocker & Hodgins, 1997).

The vast majority of offenders in this sample only received school level education (78%), whereas 15% went to college and 7% went to university. If the highest level of education obtained was a marker for whether or not a person was going to become a criminal, it would have been expected that none of these offenders would have attended college or university. Potential education attainment differences between internet sex offenders and contact sex offenders who target children suggest that this characteristic may be a distinguishing factor. However, when white-collar crime is taken into account, the educational measure becomes less significant, as more white-collar criminals have higher levels of psychometric intelligence and higher educational backgrounds (Perri, 2011). It could be that internet sex offenders are more similar to white collar offenders than they are to the general offending population.

The higher level of educational attainment found in this sample also seemed to correspond to the findings of Bates and Metcalf (2007) as well as Faust et al. (2014). However, Babchishin et al. (2011) reported in their meta-analysis that internet sex offenders did not appear to have any different educational attainment than a general population sample. They, however, were not able to test the differences found between internet only offenders and those that had contact offences as less than three studies included in that meta-analysis contained factors relating to educational attainment.

Hanson and Bussière (1998) reported that there was not a correlation between intelligence and risk to reoffend in contact sex offenders. This suggests that education attainment is not important in relation to assessment of risk. Education attainment, however, could be important for the management of

offenders in treatment programmes as very low functioning offenders have been shown to struggle in treatment programmes designed for offenders of normal intellectual functioning (Beckett, 1994). However, given the nature of the crime, all the offenders were charged and convicted with a technology-based crime, it is very unlikely that this would be an important factor for the treatment prognosis of this offender group.

Educational attainment also could have been associated with what restrictions were imposed on the offender while being managed in the community. For example, it might have been justified to prohibit an offender educated in advanced computer science from possessing a computer as they might have had the skills, knowledge and means to avoid future detection of repeat crimes. However, no association was found, as all the restrictions of liberty requested for all of the offenders were the same.

5.1.5: Socio-economic status

The SERs reported on the employment status, income level and the housing situation of the offenders. It is assumed that people of lower socio-economic status and lower wealth are more likely to be criminals than those who are better off financially (Bartol, 2002). However, with regards to this sample, that was not the case. While the majority of the offenders were in the skilled working class, working class or non-working socio-economic class, there were still approximately one third of the offenders that were in the lower-middle and middle class. This suggests that internet sex offenders do not fit with the normal socio-economic stereotypes of criminals and come from a variety of social classes. This is a trend that has been also noted by others investigating internet sex offenders (Carr, 2004; Seto et al., 2010; Wolak et al., 2011).

While socio-economic status is not a static risk factor identified to predict the risk of an offender to reoffend (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005), having instability in life (such as unemployment or lack of home) has been identified as a dynamic risk factor (Hanson & Morton-

Bourgon, 2009). These are likely factors that will need to be managed by a criminal justice social worker.

5.2: Police routinely collected data

While the police likely collected a range of information on this sample of internet sex offenders, the forensic reports focused mainly on characteristics that described offending behaviour. This was expected as the law ("Civic Government (Scotland) Act," 1982), sentencing guidelines used in England and Wales (SGC, 2003), and the theoretical perspective on internet sex offenders suggest a difference between offenders based on their offending behaviours. As discussed in Chapter 2, section 2.2.2, the behavioural characteristics that describe sex offenders appear to be the static factors most closely related to increased risk to recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). Similarly, as described in Chapter 2, section 2.3, behavioural characteristics are important for the management and treatment of sex offenders. This section discusses the behavioural characteristics on internet sex offenders reported by the police and used in this sample in relation to what other researchers have found, how these characteristics might relate to one another and what implications these findings have for the assessment of risk and decisions related to management.

5.2.1: Deviancy of SEMIC

The deviancy of an offenders' collection of SEMIC was probably the most influential way the police appeared to assess and categorise internet sex offenders. Three main measures of deviance were extrapolated from the information collected by the police about the offenders' collections of SEMIC: the age of the children depicted, the sex of the children depicted[1] and the

[1] Classifying SEMIC that depicts male children as more sexually deviant than SEMIC that depicts female children could be viewed as suggesting that homosexuality is more sexually deviant than heterosexuality. This was not the intent. The use of this terminology is a continuation of the terminology used in the literature describing and analyzing the risk assessment of contact sex

severity level of the content of the image and videos based on the modified COPINE scale (Taylor et al., 2001). The deviancy of the images and videos that the offenders possessed affects many things: whether or not the offender was in violation of the law, how the offender was sentenced, the risk they might pose to reoffend and the most appropriate management and treatment programmes/strategies.

Age of the children depicted

When classifying SEMIC, the younger the children in the images and videos, the more deviant that image or video is considered to be rated (Seto, 2013). The majority offenders in this sample possessed SEMIC which depicted children that fell into more than one age category: 75% possessed SEMIC depicting children who were in the late stages of puberty (between the ages of 14 and 18); 83% possessed SEMIC where the child victim was in the early stages of puberty (between the ages of 10 and 13); 54% possessed SEMIC where the child victim was pre-pubescent (between the ages of 4 and 9) and 13% were in possession of SEMIC where the child victim was estimated to be younger than three years of age. As expected, the majority of the offenders had media that depicted child who were older adolescents. This suggests that the more deviant offenders, or the ones that had more of a sexual interest in younger pre-pubescent children were less common.

That trend, however, did not appear to hold true when the age of the victims was assessed based on the oldest and youngest depicted child victim in an offender's collection. The mean age (7 years, SD=3.8) and median age (8 years) of the youngest child victims depicted, suggests a much more deviant trend showing the majority of offenders were in possession of media depicting children who were pre-pubescent. This was very similar to the mean age (10 years) of the children depicted in both of Long et al. (2012) samples of offenders.

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offenders, where having male victims is considered a sexual deviancy risk factor.

Although determining the age of the children depicted in SEMIC is problematic (Cooper, 2011; Cooper & Jones, 2007), age is directly linked with legislation ("Civic Government (Scotland) Act," 1982) as well as the sentencing guidelines for England and Wales, which are used for guidance in Scotland (SGC, 2003). For example, being in possession of sexually explicit media depicting 18 year olds is legal in the UK, however possessing sexually explicit media depicting a person aged 17 years is not. Similarly, the younger the child victim depicted the harsher the penalties awarded by the court (see Chapter 2, section 2.1.3).

These finding could also be just as important to the assessment of risk and management of these offenders. As previously discussed, several meta-analyses have found that having deviant sexual interests is the biggest predictor of sexual recidivism for contact sexual offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). Given that Seto (2008) argues that being in possession of SEMIC depicting pre-pubescent children is a better predictor of paedophilia than having contact offences against pre-pubescent children, this suggests that the majority of this sample of internet sex offenders could be a high risk to sexually recidivate. This is strengthened by Faust, Renaud, and Bickart (2009) who found that having SEMIC that depicted prepubescent children was a predictor of sexual re-arrest.

Severity level of the images or videos

While the severity of the content of SEMIC is not directly associated with the law, the severity of the content of the images and videos an offender possesses is important for determining the appropriate punishment (see Chapter 2, section 2.1.3). As described in the sentencing guidelines for England and Wales (SGC, 2003), the more severe the victimisation within the content, the harsher the recommended punishment. These are based on the five modified COPINE levels with deviancy increasing with each level.

The majority of offenders in this sample (71%) had a proportion of level one images in their collection, while just under half (41%) had some level four images. Approximately one third of the offenders (36% and 33%) had level 2

and level 3 images in their collections. Not surprisingly, only 15% had the most extreme level five images in their collection. It was interesting that there was such a wide range in the content of images downloaded by the offenders in this sample. A level one image (possessed by the majority of offenders) would contain some element of erotic sexual posing of the child with no sexual contact while a level 4 image (possessed by almost half of the offenders) would contain a penetrative sexual activity between children or a child and an adult. There was some overlap with some of the offenders collecting images at both of these levels, but there was a stark difference in the content of the material collected.

While 35% of the offenders in this sample collected videos as well as still images, there did not appear to be as great of a variance between the severity levels. The percentage of offenders possessing videos that were classified in each of those 5 COPINE levels was only between 9 and 20%. The largest proportion (20%) possessed level 4 videos and the smallest proportion (9%) were in possession of level 5 videos. This fairly even distribution suggests that there was less variance in the deviancy preference for the offenders who possessed videos.

While this is potentially an interesting finding, it might have less to do with the preference of the offender and more to do with what is available. As discussed in Chapter 2, Section 2.1.1, video on the internet was only starting to become mainstream due to technical constraints (for example bandwidth and storage space) over the time period that this sample of offenders was convicted. It is likely there were not as large a variety of videos as there would have been images available at the time. However, this is only speculation. This difference in variance of deviancy between images and videos in this sample could also be related to how the police coded the videos. As discussed in Chapter 2, section 2.2.1, this is quite a difficult task as videos often contained a range of levels.

Some interesting results were found when focusing only on the most deviant or highest level of severity of media (image or video) found in the offender's collection. It appeared as though there were two distinct groups of offenders: those that possessed less deviant content (level 1 and 2); and those that possessed more deviant content (level 4 and 5). There was a variance

between images and videos with the highest proportion of offenders being in possession of level 1 images. However, when videos were either considered alone or added in with the images, the highest proportion of offenders possessed level 4. This pattern was different to what has been found in other samples. Long et al. (2012) reported the vast majority of offenders in their study were in possession of level 1 media, with level 2, 3 and 4 media being all fairly evenly distributed and very few offenders being in possession of level 5 media. Their analysis, however, was different in that it looked at the proportion of media the offenders were in possession of based on the modified COPINE rating levels compared to the overall total number of files in their possession. They argued an offender was *anchored* in the category which they possessed the most images or videos. This contrasted what was done in my study, where *the highest rated* image or video in the offender's collection was used as the measure of deviancy. This makes it a difficult to directly compare these two samples based on this particular deviancy measure.

The predictive validity of the modified COPINE rating scale, in terms of reoffending, has not been tested. However, the assumptions made in the sentencing guidelines (SGC, 2003) for England and Wales, that the more extreme the image or video, the higher the risk of offender, fits with the general deviancy trends with contact offenders who target children. Glasgow (2012) argues that possession of high rated SEMIC is indicative of more deviant offenders and as a result potentially higher risk offenders. There are, however, some contradictory findings, in that one study found that offenders who were rated a low risk to reoffend on the Static 99 and the RM2000 were found to be in possession of more extreme SEMIC than offenders who were rated a high risk to reoffend (Osborn, Elliott, Middleton, & Beech, 2010). The overall results of the Osborn et al. (2010) study, however, were that the predictive validity of those tools was not significant. The lack of predictive validity is a key factor for further investigation and analysis.

Sex of the children depicted in the SEMIC

A third potential characteristic related to deviancy, which was reported by the police, was the sex of the children depicted. Contact sex offenders who target boys are considered to have more deviant sexual interests than offenders who target or offend against girls (Hanson et al., 2007; Mann et al., 2010). Seto (2008) argued that possessing SEMIC depicting pre-pubescent children was a better predictor of paedophilia than having committed contact offences against pre-pubescent children. The same argument could be applied to offenders who possessed SEMIC depicting boys, they likely had a sexual attraction to boys. This suggests offenders who were in possession of SEMIC depicting boys were more sexually deviant than offenders who only possess SEMIC depicting girls.

In this sample of internet sex offenders, the majority (56%) possessed SEMIC that depicted boys, and of those, 12% possessed SEMIC that depicted only boys. This suggests most had deviant sexual interests, which was unexpected and different to what others have found. The majority of contact offenders who target children have only female victims, and very few offend only against males or have male and female child victims (Hanson & Morton-Bourgon, 2005). Several studies that assessed internet sex offenders also found that most offenders possessed SEMIC that depicted only girls (Long et al., 2012). Seto et al. (2010), however, reported similar results to what was found with this sample. They found that 54% of the offenders in their police sample and 61% of the offenders in their clinical sample were in possession of SEMIC that depicted boys.

These results suggest that this particular sample of internet sex offenders has more deviant sexual interests than both contact sexual offenders who target children and potentially other internet sex offenders. As discussed above, and similar to the other two potential sexual deviancy measures, this could have potential implications for these offenders' risk to recidivate as it has been found that having deviant sexual interests is the best predictor of sexual recidivism for contact offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). Seto (2009) found, in one of his samples, that the ratio of content that was depicting boys relative to the content that was depicting girls

was an accurate predictor of child pornography recidivism; the offenders with larger collections of SEMIC depicting boys were more likely to reoffend than the offenders with collections of SEMIC depicting girls. Similarly, the increased deviancy of this sample of internet sex offenders could have implications for their management and treatment.

Relationship between the deviancy characteristics

Given the prospective importance the deviancy of an offender's collection of SEMIC could be to their risk to recidivate and to the subsequent management decisions made, as well as the notion that there are potentially three separate deviancy measures, this thesis investigated the relationship between those factors. Correlational relationships were found suggesting a positive or additive relationship between the factors.

While no relationship was found between the sex of the children depicted in the offenders' collection of SEMIC when compared with the highest level of media (images and videos combined) (Kendall's tau-c = -.189, N=72, $p>0.05$), a correlational relationship was found between the sex of the children depicted and the highest level of image found in an offender's collection (Kendall's tau-c = -.217, N=72, $p<0.05$). This negative correlational relationship showed that as the deviancy or severity of the image increased so did the likelihood that the offender would have been in possession of images that depicted boys (also more deviant).

A similar relationship was also found when comparing the age bands of the youngest child depicted and the highest severity level of media (or image alone) found in the offenders' collection (Kendall's tau-c = -0.342, N=70, $p<0.001$ and Kendall's tau-c = -0.400, N=70, $p<0.001$). These negative correlations indicated that as the deviancy or severity of the SEMIC content increased, the age band of the youngest child depicted decreased (also more deviant).

The age of the child victims was likely to be based on physical characteristics and an arbitrary age assigned to the child depicted by the police based on those characteristics (Cooper, 2011; Cooper & Jones, 2007). Most of

the results of my study were reported using age bands, which corresponded to the physical characteristics of children of that age range. This aligns better with the salience of the images for the offender, as they were more likely to respond to the physical characteristics of the child and their level of sexual development rather than the actual age of the child per se (Cooper & Jones, 2007; Seto, 2013). However, as the police did estimate the age of every child depicted in every image, it was possible to examine those ages as a continuous variable, examining correlations for each offender on the age of the youngest victim on the images collected with the highest rated severity level. As with the age bands, a similar relationship was found with a main effect between the different means suggesting that as the deviancy or severity of the SEMIC content increased, the average age of the youngest child decreased, $F(4,62)=5.626$, $p<0.0$ (for just images) and $F(4,65)=4.501$, $p<0.01$ (for images and videos combined).

The relationships found between these three variables were expected. They suggest that offenders who have a deviant sexual interest in very young children are also the ones collecting the most extreme images and videos and also likely have a sexual attraction to boys. Had these offenders also been contact offenders, this increased sexual deviancy would likely lead to a significantly increased risk of sexual recidivism (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009).

However, while all of these post-hoc results were expected and suggested a potential link between the different deviancy measures, some caution needs to be exercised. The specific way in which the police reports were structured made it impossible to determine how the offenders' collections were broken down in terms of the rating of the image/video as well as the sex and age of the child victims depicted. This means the offender's most deviant or extreme image or video might have not depicted a male victim or even the youngest victim. The images or videos that were depicting the boys or the youngest victims could have been the SEMIC that were less deviant or rated lower on the scale. Further research is needed to establish whether or not there is a true relationship between these three factors.

5.2.2: Number of Images and Videos

More than half of the offenders in this sample had less than 1,000 images and videos with 39% of those offenders possessing less than 100 images and videos. In contrast, 16% of the offenders in this sample had more than 10,000 images and videos. This distribution was similar to that found by Seto et al. (2010). In their sample drawn from police files, 43% of offenders had less than 1,000 images and videos, which contrasts the 77% of the offenders from their clinical sample. However, (Seto et al., 2010) had far less offenders with fewer than 100 images and videos (16% of police and 27% of clinical sample). In terms of the offenders who had very large collections (of over 10,000 images and videos), 32% of Seto et al. (2010) police sample fell into this group while none of the offenders in their clinical sample claimed to have more than 10,000 images and videos. This sample of offenders also seems to resemble that used by Wolak et al. (2011) in 2000 and 2006 with 71% and 74% (respectively) of their offenders having less than 1,000 images and 37% and 31% having less than 100 images. (Wolak et al., 2011), however, had far fewer offenders with very large collections, with only 3% and 4% (respectively) of the offenders having more than 10,000 images.

As discussed in Chapter 2, Section 2.1.2 and 2.1.3, the number of images and videos an offender possessed did not make a difference in relation to the law (one illegal image or video was enough for conviction), but had an impact in sentencing. If these offenders were in the United States, the vast majority of them would have been given lengthy custodial sentences (United States Sentencing Commission, 2013). However, in the UK, only offenders with large collections (in the thousands) are given custodial sentences (Scottish Government, 2008; SGC, 2003).

While the number of images and videos an offender collected did not have a direct link with previous literature relating to the risk the offender might pose to reoffend, the number of images and videos might relate to sexual preoccupation. Glasgow (2012) defines sexual preoccupation as how much the deviant activities the offender is participating in interferes with, or dominates,

an offender's life. Hanson and Bussière (1998) found in their meta-analysis that having a high sexual preoccupation was a factor that increased the likelihood of sexual recidivism for sexual offenders. Given the average number of images and videos these offenders possessed, in this sample, was quite high (6,413 files), the likelihood is some of these offenders spent a considerable amount of time collecting these images and videos and were likely sexually preoccupied by them.

Number of images and videos in relation to deviancy

The number of images and videos an offender possessed in relation to their deviancy could be important for the courts in determining the most appropriate sentence. The sentencing guidelines in England and Wales (SGC, 2003) stipulated that the higher quantities of deviant images or videos warranted harsher punishments. Significant correlations were found between the number of images and videos the offenders in this sample possessed and the three characteristics that could be used to describe the deviancy of the images (severity, the age and sex of the children depicted).

The positive correlation found between the size of an offender's collection and the highest rated image or video they possessed in terms of severity (Kendall's tau-c=2.30, N=80, $p<0.01$) showed that as size of the offender's collection increased the likelihood that they possessed an image or video rated level 5 also increased. These results were similar to what Seto et al. (2010) found, that offenders with the larger collections also had the more deviant content. This could be potentially important in reflecting an escalation or progression in offenders' behaviour. Several studies (Seigfried-Spellar & Rogers, 2013; Sullivan & Beech, 2004) have suggested that internet sex offenders become desensitised or sexually bored with the images or videos that they might have been using as a sexual stimulus. To obtain the same level of sexual arousal or gratification, more extreme or deviant images or videos are needed. These findings seem to corroborate that assumption. The increased deviant sexual interests and increased sexual preoccupation could also increase those offenders with large deviant collections risk of sexual recidivism (Hanson

& Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) as well as management and treatment needs.

The results of my study, however, contrast Long et al. (2012); they found that the offenders with the lower rated images had the largest collections. As described above, however, their analysis was different in that it looked at the proportion of SEMIC the offenders were in possession of, based on the modified COPINE rating levels, in comparison to the overall total number of files in their possession, instead of the highest rated image or video, based on the modified COPINE scale, that the offender possessed, like in the case of my study.

A marginally significant correlation was also found between the size of the offender's collection of SEMIC and whether or not he had any images or videos that depicted boys (Kendall's tau-c=.232, N=72, p=0.06). This correlation suggests that the offenders with the larger collections were more likely to have SEMIC that depicted boys. This too matches what Seto et al. (2010) found in their police sample of offenders with very large collections, that they were also likely to possess media that depicted boys.

There was also a significant negative correlation found between the size of an offender's collection of SEMIC and how deviant that collection was based on the age of the youngest child depicted (Kendall's tau-b=-.308, N=80, $p<0.001$). This correlation suggested that as the size of the offender's collection got larger, the age of the youngest child depicted got younger. As expressed above, Seto et al. (2010) found their police sample of offenders, who had the larger collections of 10,000+ images to be more deviant on several factors. However, they did not specifically mention the age of the youngest child victim in relation to the size of their offenders' collections of SEMIC. They did mention paraphilic content as one of those more deviant factors, which can include paedophilia or the sexual attraction to prepubescent children.

Similar to the argument made above for the relationship between the size of an offender's collection and rating levels of the images or videos, the relationship between size and deviancy based on sex and age of the children depicted is just as important. These two findings also support the notion that offenders could have been desensitised to the less deviant images and videos

and began collecting more deviant ones to sustain the same level of sexual arousal; being evidenced by the large collectors possessing the most deviant content. Similarly, these behavioural characteristics could affect the level of risk the offender poses to reoffend, having more deviant sexual interests and a more intense sexual preoccupation (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). The relationship between these behavioural characteristics could also be important for the proper management and treatment of these offenders.

5.2.3: Where the SEMIC came from

One of the more straightforward distinctions between offenders that became evident in the analysis was that the police appeared to be interested in, where the SEMIC was obtained. This information perhaps could have provided insight into how these particular offenders operate, which in turn may better inform the investigation of the current crime as well as those in the future. According to the literature, however, this particular behavioural characteristic does not appear to be important in relation to the risk this offender might sexually recidivate (Babchishin et al., 2014).

As this sample dates from 2002 to 2009, it was not surprising that the vast majority of offenders (68.8% N=55) obtained their collections of media from websites, with a smaller number of the offenders (8.8% N=7) collecting their media from peer 2 peer (P2P) networks. During the time period, 2002-2009, it is likely that websites would have been the easiest and most straightforward place for these offenders to find SEMIC. Users with limited technological knowledge would have been able to apply the skills that they have learned about using the web for other activities to apply to this deviant activity. A trawl in one of the search engines to find the latest sports scores would require the same skills as a search for sexually explicit media involving children (Brown et al., 2007).

Having sourced SEMIC from a static website, versus from a P2P network, is an important distinction to make as it changes not only how the police will investigate and try to prevent future crimes, but also changes how the

prosecution could argue the case in relation to the law. It is also potentially important for the management of the offender. As described in Chapter 2, Section 2.1.1, static websites that host SEMIC do not contain user generated content and the website owners (or delegates) are the only ones posting and thus sharing/distributing the SEMIC. However, with P2P networks, users simultaneously share (distribute) the SEMIC they are downloading, potentially warranting more serious punishments.

While the police and prosecution have largely focused on individual offenders, there are some questions to be asked with regard to the general offending behaviour patterns of this sample. It may be important to consider whether there may be other underlying factors in why some of the offenders obtain their media from websites, while others got it from P2P networks. While technological ease is one potential factor, the willingness to pay or buy SEMIC is potentially another. In terms of Operation Ore and Operation Avalanche, each of the suspected offenders was questioned due to their credit card being used to buy access to the Landslide Productions website (Jewkes & Andrews, 2005). In those instances, the offenders were willing to buy and pay for SEMIC.

Another way in which offenders pay for SEMIC is through membership to a forum or other centrally managed system (Mitchell et al., 2011). In those instances, the *free and public end* of the forum or website might seem completely legal and legitimate, but offenders pay for the privilege to trade and download SEMIC in the back end or hidden sides of the forum or website. P2P networks on the other hand are free to use and work on the basis of the community sharing media freely amongst one another. In this case there is no monetary gain for offenders trading or sharing SEMIC, but there has been an argument made that trading SEMIC commoditises it, giving the media itself a value (Estes, 2001).

While this sample had a reasonably low proportion of offenders that were using P2P networks as their source of SEMIC, the number of offenders obtaining material from this source seems to be increasing (Latapy, Magnien, & Fournier, 2013; Wolak et al., 2011). One possibility as to why an offender might have chosen to use a P2P network to source their material rather than paying

for membership to a website or a forum could have been the *perceived* anonymity. As explained in Chapter 2, Section 2.1.1, a person is only identifiable on a P2P network by their IP address, which has its own limitations in identifying an actual person (Auerbach, 2013; Latapy et al., 2013; Lundevall-Unger & Tranvik, 2011). In some clients and networks, it is even possible to mask IP addresses, through VPNs (virtual private networks) or proxy servers, and truly connect anonymously (Steel, 2009).

Where an offender obtained his SEMIC is likely not important to the assessment of risk to recidivate. The meta-analyses looking at all the known behavioural factors reported in different studies did not mention the source of an offender's SEMIC or the willingness to pay for it (Babchishin et al., 2014; Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). However, the reasons why an offender chose to use one source over another could be associated with anti-sociability, which has been found to be a dynamic risk factor (Hanson & Morton-Bourgon, 2009). Offenders who are active in social groups that share and trade SEMIC could be intrinsically different from offenders who remain anonymous and obtain their SEMIC static sources. Several other authors have noted the strong sense of community offenders find in trading and sharing SEMIC (Beech et al., 2008; Sheehan & Sullivan, 2010). Babchishin et al. (2014) found in their meta-analysis of 30 samples, that internet sex offenders were less antisocial than contact offenders who target children or mixed offenders (both internet and contact). Given that increased anti-sociability increases the likelihood that sex offenders will recidivate (Hanson & Morton-Bourgon, 2009), offenders who obtain their SEMIC from large sharing communities could be considered to be more sociable and less likely to recidivate. Conversely, though, these offenders might have difficulty finding legal and socially acceptable alternatives to their SEMIC sharing groups post conviction. This could make them more likely to want to find that sense of community again and will need to be addressed by practitioners. This is also an area where further research could help with offender management.

Where the SEMIC was from in relation to quantity and deviancy

Within the current study it was anticipated that offenders who sourced their material from websites would be distinctly different from those offenders who obtained their SEMIC from peer 2 peer networks in relation to: where the SEMIC was stored, how large the collections were, how deviant the SEMIC was and whether or not an offender attempted to hide his collection. From the police subset, there were no correlations between where the offenders got the media from or any other recorded factors. This suggests that the offenders could not be differentiated based on their source of SEMIC, which was contrary to the findings of Wolak et al. (2011). In their 2006 sample of internet sex offenders, when compared to a 2000 sample, there was an increase in the use of P2P networks by offenders to collect indecent images and those offenders had collections of images that were more extreme (more sexual violence and younger victims depicted).

5.2.4: Where the SEMIC was physically stored

While there has been very little research into where offenders store SEMIC (see Chapter 2, section 2.1.4), this is another aspect of the crime that appeared to be important to the police. In 85% of the cases, the offenders stored the media on an internal hard drive. This is the default place that a digital file or piece of media would have been stored when downloaded from the internet from a website or a peer 2 peer network, and it might be expected that the vast majority of offenders would have media stored there (Microsoft, 2013). However, what was interesting was that 58.8% of the offenders also had SEMIC stored on portable devices such as CDs, DVD's and USB drives. In addition, there were seven offenders who did not store any media on their internal hard drive. This was clearly purposeful rather than accidental behaviour, as the media could not have been placed there by mistake. They would have had to make a conscious decision to save, or copy those files to those portable media forms. This could be closely related to offenders who chose to hide the SEMIC they possessed which will be discussed in Section 5.2.5.

Overall, these characteristics seemed to match that of both Wolak et al. (2011) 2000 and 2006 samples. They found that the majority of their offenders (84% and 90%) had SEMIC stored on hard drives and just less than half (47% and 37%) also had content stored on portable media, but they did not report whether or not any offenders stored SEMIC only on portable media.

From scrutiny of the records kept by police, concerning interviews with the offenders, it became apparent that in cases where media had been stored on portable devices (partially or wholly), the police, as well as the procurator fiscal, seemed to argue that these offenders were intending to distribute or share these images with others. The rationale was that this was the reason for storing the images on portable devices. In relation to the way the law has been written, it would be up to the defendant to prove that distribution or sharing was not his intention ("Civic Government (Scotland) Act," 1982). As distribution or publication has harsher penalties attached to it (see Chapter 2, section 2.1.3), attempting to secure this type of conviction would be a strategic move for the prosecution.

However, distribution is not the only reason why an offender might have chosen to store SEMIC on portable storage devices. One possible reason for this action could be that the offender had more than one computer and that using the portable media was the easiest way to access his collection from any of the computers he was using. Another possible reason could have been that the offender was trying to keep his collection hidden from others. He could have had children or a wife that he was attempting to hide the media from, and by storing it on portable media he was able to physically separate the files that someone else might stumble across. A third plausible explanation, which also contradicts the police and prosecution assumption of the intent to distribute, is that of an offender is highly organised, maybe even to the point in which he has obsessive or compulsive tendencies, in which each of the media files is categorically organised and stored (Berlin & Sawyer, 2012; Marshall et al., 2012). It could be that it is easier for his categorical system if the media is stored on different physical media that he can store in certain specific places.

It is also possible that the age of the offender could have made a difference between where the offender actually chose to store the media. An age difference was found, in which the younger offenders were more likely to store their collections of SEMIC on internal hard drives while older offenders were more likely to use both internal and external storage medium (Kendall's tau-c = .205, N=64, p<.05). It was expected that an opposite trend would have been found with the older offenders using only internal hard drives, as this is the default save position of computers and would not have taken any advanced technical knowledge (Microsoft, 2013).

A possible explanation for these findings may relate to the intent of the offender. As discussed above, when the offender saved media to external devices, a choice was made to deliberately save the files there as opposed to a possible accidental save to an internal storage device. As the older offenders were more likely to use a combination of the internal and external media, perhaps they were more conscious about what material they were saving and their intentions were clear. On the contrary, the younger offenders might not have been as conscious as to what they might have been saving and therefore some of the media might have been stored on their internal hard drives.

Either way, the place an offender chooses to store his collection of SEMIC could be an important behavioural characteristic regarding his future management. While no studies have been found to suggest that internet sex offenders keep storing the images and videos they collect in the same way, other studies assessing the behaviour patterns of collecting would suggest that (McIntosh & Schmeichel, 2004). Knowing that an offender stored his collection of SEMIC on USB sticks could make it easier for a practitioner to recommend that a Sexual Offences Prevention Order (SOPO) ban his use of external media and that any saved files must be saved to an internal hard drive. This would make it easier to check the files saved by an offender and to make sure he was not reoffending. It was interesting that the criminal justice social workers did not take this behaviour characteristic into account when making their recommendations for management.

5.2.5: The use of encryption or other methods to hide the SEMIC

As with the storage of data, the police also showed interest in whether or not the offender attempted to hide some or all of their collection of SEMIC. While this did not have a direct link to the law ("Civic Government (Scotland) Act," 1982) pertaining to the possession, distribution or production of SEMIC, it was an offending behaviour that could aid the police's future investigations of similar offences. Understanding exactly how offenders attempted to hide such material would make locating it in future cases much more time efficient. While the use of encryption is not illegal in the UK, failure to decrypt data in certain circumstances could be illegal ("Regulation of Investigatory Powers Act 2000," 2000). The hiding behaviour might also convince the judge to institute stricter punishments if the offender was convicted, as recommended in the sentencing guidelines for England and Wales (SGC, 2003).

For the offenders in this sample, hiding media took many forms, from simply hiding files in a folder structure, to renaming files, to physically hiding the media. For example, one offender hid a hard drive in his toilet, while another had an additional unconnected hard drive in his computer. To access the files on the drive, one needed to take the computer apart and plug the drive in. There were also offenders who used encryption or passwords to protect files and prevent others from gaining access to the content. Thirty-one per cent of the offenders in this sample attempted to hide the files through encryption, passwords or other physical means.

There has been very little interest in the use of security behaviour in relation to these offenders, but as Seto et al. (2010) points out, this clearly is of relevance both to the assessment of risk and the capacity of law enforcement to investigate the case. Glasgow (2012) argues that images or videos that offenders hide, encrypted or put into categorical folders are more significant to those offenders than other types of images or videos. He speculates that if the offender took the time to hide, move or encrypt part or all of their collection of SEMIC, that that shows an intent and callous calculation. This could be related to their attitudes about the crime perhaps relating to guilt or shame. Similarly, this

could be important to managing offenders in the community. Offenders, who have used encryption or have attempted to hide SEMIC in the past, have the knowledge and means to do it again. This could make future detection difficult. While no studies were found suggesting that internet sex offenders who used encryption in the past will do it again to prevent future detection, the potential difficulty in detection potentially outweighs the risk. Surprisingly, none of the criminal justice social workers mentioned this behavioural characteristic when making their recommendations about risk or management.

Relationship to other behavioural characteristics

Given the size and range of deviancy that some of these collections presented, a post hoc analysis was conducted to test whether or not offenders were choosing to hide or encrypt specific images or videos. However, no statistical differences were found between whether or not an offender hid SEMIC in relation to known content. This suggests that reasons to hide the images or videos likely did not relate to the content of the SEMIC. Similarly, there was no relationship found between the age of the offender and whether or not he chose hide or encrypt his collection of SEMIC.

A marginally significant negative correlation however was found between offenders who distributed and those who used encryption or attempted to hide their collections of SEMIC (Kendall's tau-b = -0.186, N=80, p= 0.059). This correlation suggests those offenders who were distributing media were not likely to try to hide the files that they had in their collections. It may be that for offenders who were distributing the media via a P2P platform, their collections needed to be completely unencrypted or not password-protected for the file system to work. It could also be that those offenders that were distributing media were not afraid of being caught by a family member or co-worker and because of that were less likely to try to hide or encrypt the files.

If this finding were to be representative of all internet sex offenders, it would suggest that the less serious offenders (those that do not share or distribute images) are the ones more likely to try to prevent others from accessing or finding their collections of SEMIC. This could potentially make

policing more difficult as the offenders with the hidden or encrypted files will not be known to anyone and the chances of someone else finding the SEMIC are probably fairly low.

5.2.6: Offenders that distributed SEMIC

Whether or not an offender distributed SEMIC was also a behavioural characteristic that was reported on by the police. This was likely a result of the distinction made in the legislation ("Civic Government (Scotland) Act," 1982) and as such made a difference to how they would have been sentenced. In this sample, almost a quarter (N=19, 24%) of the offenders were also considered to be distributors. As discussed earlier, the police and prosecution could have included in this category: those offenders that stored some of their media on external devices; offenders who may or may not have been intentionally sharing media on P2P networks; and those offenders who were deliberately distributing the media for various reasons.

It was not possible to determine, based on how the police reported the details of the crime, whether or not an offender distributed only certain content from their collections, so it was assumed that the media in their collections was being shared equally. Based on that assumption, the only marginally significant relationship between whether or not the offender was a distributor and any other factor based on the crime committed was discussed earlier, whether or not the offender attempted to hide some of the media files.

Mitchell et al. (2011) argue that there is only one main reason as to why an offender might distribute, trade, or share SEMIC, and that is profiteering. This can be from a monetary perspective, where money or currency is actually exchanged, although Mitchell et al. (2011) showed that a very small percentage of the distribution cases, 10%, actually involved the exchange of money. It was not known through the information collected whether or not any of the offenders in this sample received any money for their involvement in the distribution of SEMIC. The other way in which profiteering is involved, was mentioned earlier, that in the circles of SEMIC distribution and trading, the SEMIC itself has a commoditised value, or is worth something (Estes, 2001).

A recent study looking into the prevalence of SEMIC seized in the UK based on the sex, age and race of the children depicted found that girls were four times more likely to be depicted than boys and that white children were ten times more likely to be depicted than other races (Quayle & Jones, 2011). This study also found that very few young children were depicted. These results seemed to match what other studies describing similar characteristics of SEMIC found in other parts of the world (Baartz, 2008; Bunzeluk, 2009; Carr, 2004). Based on the scarcity of the more deviant images and videos (those depicting males, those with very young children and those with higher ratings on the modified COPINE scales) it could be assumed that the more deviant an image or video was, the more valuable it would be. As such, those offenders that were distributing or involved in trading rings of SEMIC might have had larger quantities of more deviant material. However, no correlations were found between whether or not an offender was a distributor and how large or how deviant the SEMIC in his collection was. This suggests that the assumption of value based on scarcity may not be correct.

The meta-analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) assessing characteristics associated with elevated risk to recidivate for contact sex offenders do not mention sharing or distributing SEMIC as a risk factor. As discussed in Chapter 2, Section 2.2.2, this suggests that this behavioural characteristic might not be important for risk assessment. It is potentially important, however, for offender management, which makes it surprising that criminal justice social workers made no mention of it in their recommendations. For offenders who have been involved in a community or the social sharing of SEMIC, being reintroduced into that type of setting could encourage repeat offending behaviour. It is likely for these offenders, this will be a behaviour that is addressed in treatment, but practitioners could have also used sexual offences prevention orders (SOPOs) to prohibit offenders from affiliating or taking part in social groups where deviant sexual activity is discussed.

5.2.7: Offenders that produced SEMIC

Producers of SEMIC can be categorised in a number of ways. They can be classified as contact offenders, as they had sexually abused children and in the process of this captured the event in images or video form. They could also be classified as people who use a computer to alter a "legal" image to make someone 18 and over look under 18 years old, or be someone has created a composite illegal image or video from multiple images that would be legal on their own. However, as discussed in Chapter 2, Sections 2.1.2 and 2.1.4, more recently, and in the non-traditional sense, legal precedent has been established identifying people who have "downloaded" or "saved" SEMIC to their computer or some other form of device, as a producer of that media as they have now brought another copy of that media into existence. It appears that in respect to this sample, the police reported only producers as ones who would have been also described as committing a contact offence or they were the original creators of an image or video.

Ten offenders (13%) were reported to have produced images. This frequency was lower than the 20% that Wolak et al. (2005b) reported. However, it is much closer to the frequency that Wolak et al. (2011) reported in their two samples; 14% and 17% of their offenders who were in possession of SEMIC also had produced some images and/or videos. These offenders are more similar to contact offenders who target children than the internet sex offenders in this sample who did not produce any SEMIC; they should also be considered to be a much higher risk to recidivate (Babchishin et al., 2014). This should also be a very important behavioural characteristic for the management of these offenders. Given the majority of these offenders committed contact offenses against children, they are likely a risk to children in the community. Similarly having committed contacted offenses will require a more intensive sex offender treatment programme (Middleton, 2008).

Relationship to other behavioural characteristics

Similarly, to the argument that was made for distributors of SEMIC, it was anticipated that the more deviant the content of an image or video, the

more valuable it would be. Based on those assumptions, a negative correlational relationship between whether or not an offender was a producer and the deviancy of the image content was expected. There was only one significant relationship found based on three deviancy measures; the number of offenders that were producers versus those that were not, when compared by the age of the youngest child victim depicted in the media that they possessed (Kendall's tau-c=2.04, N=70, $p<0.05$). Conversely though, this was a positive correlation that showed that as the age of the youngest child depicted started to get older, the likelihood of whether or not the offender was a producer went up as well. This relationship was opposite of what was expected, as the deviancy of the images or videos went up, the likelihood that the offender was also a producer went down. However, these results were similar to what Carr (2009) found in that the producers in her sample had less deviant media involving children than other internet sex offenders.

There was very little overlap between the offenders who were classified as distributors with those that were producers. Of the ten offenders that were producers, only two of them (20%) were also distributing or sharing the media. While this difference was not statistically significant, it is interesting to postulate why there might be a difference. Sheehan and Sullivan (2010) argued that there might be two sub-groups of producing internet sex offenders, those that produce and share and those that produce and do not share. They found that their groups of sharing producers, created SEMIC that was much more deviant than the non-sharing producers. This might explain why a positive correlational effect was found, where a negative was expected. As the vast majority of the offenders in this sample were producing but not distributing, it could be that those offenders were in possession of the less deviant material and the producers who were distributing (only two) were in possession of much more deviant material. This sample was too small to test that hypothesis.

Questions still remain as to why some offenders produce and share while others produce but choose not to share. Sheehan and Sullivan (2010) proposed a few different reasons from control and power to a sense of belonging as explanations to why offenders might produce and share. However, as their

sample was small, only four offenders, they were unable to explain why the offenders would produce images and not share them. It could be that those offenders will progress with time and will escalate to more extreme contact offences that they share (Seigfried-Spellar & Rogers, 2013), or it could be that there are some other psychological factors that prevent them from wanting to share those images and videos. Perhaps they feel more guilt or more shame than the other producers. More research is needed to understand the reasons for those differences and how that might relate to escalated risk to recidivate or management issues.

5.3: Relationships between demographic and behavioural characteristics in the context of risk assessment and offender management

As discussed in Section 5.1, the criminal justice social workers appeared to consider only the demographic characteristics of the offenders when assessing their potential to recidivate and in making their recommendations for management. Given that the characteristics used to describe the offender's behaviour in relation to the crime seem to have a stronger association to risk assessment and offender treatment programmes (see Chapter 2, sections 2.2.2 and 2.3.3), one of the post-hoc analysis research questions was assessing how useful relationships between demographic and behavioural characteristics might be in making risk assessment and management decisions. Several significant relationships were found, suggesting that there potentially is some use in a utilizing both demographic and behavioural information when assessing risk and making recommendations for management. The relationships between the demographic and behavioural factors, in relation to risk and management, are discussed below.

5.3.1: Offender age in relation to quantity and deviancy of SEMIC

The age of a sex offender when he commits the crime has been found to have a strong association with his likelihood to recidivate (Hanson & Bussière,

1998; Hanson & Morton-Bourgon, 2005, 2009). It was no surprise then when both the police and criminal justice social workers reported on the age of the offender. However, the age of an offender in relation to the deviancy and quantity of the images and videos he possessed could also be important in relation to risk. One of the recurring themes of this thesis is the potential parallels and differences between internet sex offenders and contact sex offenders who target children. For contact sex offenders who target children, the age difference between the offender and the child victim is important for treatment (Beckett, 1994). Offenders who sexually abuse children who are very close to their age (for example in the case of statutory rape), are not really considered to be of a high treatment need (Glowacz & Born, 2013). A parallel could be drawn between internet sex offenders and the age of the children depicted in the SEMIC they possess.

The only relationship found between the age of the offender and the size and deviancy of his collection of SEMIC was with the age of the youngest child depicted. This marginally significant negative correlation ($r=-.241$, $p=0.063$) showed that as the age of the youngest child victim depicted got younger, the mean age of the offender got older. This suggests that the age of the offender might have played a role in what age of victim a particular offender was attracted to. In this sample the younger offenders, those that were in their teens and 20's, possessed SEMIC where the youngest child victims depicted where pre-pubescent or older, whereas those offenders that were in their 40's and 50's possessed images of younger children, including those depicting children less than 3 years old.

Ryan and Lane (1991) suggested that interest in erotic material and its use in masturbation is a normal adolescent sexual behaviour. As the majority of the younger offenders in this sample seemed to be in possession of media that depicted older children, it is possible that some of those cases could be explained by normal adolescent sexual behaviour. Some of the younger offenders' victim choice could be explained by age appropriate relationships. For example, the offender who was in his teens, the youngest victim depicted in his collection was in late puberty making the age difference between the

offender and the child within the image only a few years. Millon and Davis (1993) argue from a developmental psychological standpoint, that there is nothing wrong with an adolescent being sexually attracted to his peers who may be the same age or slightly younger/older. Depending on the circumstances, it may be possible for an 18 year old, who could be late in sexual development, to be considered to be age appropriate to a child victim who might be in the early stages of puberty or about 13 years old.

The relationship between the age of an adolescent or young internet sex offender and the age of the child victims who are depicted in their collections is significantly under-researched. As empirical research looking into adolescent contact sex offenders seems to suggest that there are fundamental differences between those offenders that sexually assault their peers and those that sexually assault children significantly younger than themselves (Seto & Lalumière, 2010), it may be that there are perhaps similar differences between those two groups of young internet sex offenders. More research into this area might help assess whether or not those young offenders that are in possession of SEMIC that depicts their peers or children much younger than them, are similar in their likelihood to re-offend to those young offenders that commit contact offences. In those contact offence cases, those who offend against their peers are not as high a risk as those that offend against children significantly younger than them (Glowacz & Born, 2013).

However, those offenders who are over the age of 30 years old and have collections of SEMIC depicting child victims younger than the age of three, cannot be described as having an age appropriate sexual attraction. In these instances, the age of the children depicted in the SEMIC, or more realistically the stage of sexual development that the children are at, should link with the offender's sexual proclivity (Long et al., 2012). As discussed earlier, it is assumed that offenders who are sexually attracted to, or in possession of and assumed to be sexually attracted to, very young children, are a higher risk to reoffend than those offenders who are sexually attracted to late pubescent children. While there is some contradictory evidence against this in terms of contact sex offenders who target children (Kingston, Firestone, Moulden, &

Bradford, 2007; Moulden, Firestone, Kingston, & Bradford, 2009), the sentencing guidelines for internet sex offenders in use in England and Wales (SGC, 2003) seem to suggest harsher penalties are needed to lower that risk of recidivism. The data from my sample seems to suggest the older offenders were a higher risk to reoffend than the younger offenders, seeing that as the offenders got older the age of the youngest child depicting in their collection got younger. Further research in this area is needed to understand if that is actually a correct assumption.

While this data does suggest that there was a negative correlation between the offenders' age and the age of the youngest child depicted, it is not known if this correlation would hold up over time. If it does, this would further the argument that desensitisation to pornographic stimuli happens over time and more extreme content is needed to obtain climax (Seigfried-Spellar & Rogers, 2013; Sullivan & Beech, 2004). As the younger offenders get older, their preference for child victims will get younger. More research is needed in terms of understanding the victim choice of internet sex offenders, how that might evolve over time and how that might relate to risk to commit contact offences.

5.3.2: Offender age in relation to whether or not he distributed or produced SEMIC

There has been very little research looking at how the age of an offender might relate to whether or not he might be a distributor or producer of SEMIC. Similarly, to what was discussed above, the age of the offender in relation to the age of the victim (for the producers) could potentially lead to motivational understanding. For instance, there have been numerous cases recently in the United States where teenagers have been prosecuted for sexting or sending explicit photos and videos of themselves to other teenagers (Lampe, 2013). In those cases, the ones producing the image or video (albeit of themselves) have been charged with production of SEMIC and those who have been recipient of it have been charged with possession. In some cases, those images or videos have been forwarded on to others and as a result the senders were then charged with distribution. Hasinoff (2013) argued that sexting, be it sexually explicit or not,

should be thought of as a creative form of self-expression and is actually empowering youth. Comartin, Kernsmith, and Kernsmith (2013) found that while there is a general lack of support for placing youth involved in sexting on the sex offender registry, there were differences based on the age and sexual orientation of the ones sending the images or video.

While it has been reported that as many as 20% of teens between the ages of 13 and 19 have sent a nude photo of themselves to someone else ("Sex and Tech: Results from a Survey of Teens and Young Adults," 2008), the prevalence of teenagers engaging in this activity in a sample of producers and distributors of SEMIC must be quite small. In my sample it only accounted for one offender. Because of overall small sample size of offenders that were producers in my sample (N=10), it was not unexpected that a relationship was not found between the age of the offender and whether or not they were a producer of SEMIC.

Similarly, also mentioned before, Sheehan and Sullivan (2010) discussed the reasons why offenders might produce SEMIC and share, or produce SEMIC and not share. While they didn't specifically mention age as a factor, the two offenders in their sample who were producing and sharing were older (36 and 46) than the two offenders who were producing but not sharing (28 and 33). While this could be coincidental, their age or more specifically stage in their life, could have explained why the older ones produced and distributed SEMIC while the younger ones produced but kept those images for themselves. Sheehan and Sullivan (2010) argued that wanting to fit in and feel a part of a community was one of the motivational factors that drove all of their offenders to share images, but that fear of getting caught and wanting to keep ownership were the two reasons that the younger offenders offered for why they didn't share the images they produced. Perhaps as those two younger offenders got older, or if they had been able to continue their offending behaviour, with time, they would have lost that fear of getting caught and would have started to share the SEMIC that they produced.

5.3.3: Offender relationship status in relation to quantity and deviancy of SEMIC

One common myth about contact sex offenders who target children is that they are sexually frustrated men who cannot form committed sexual relationships with adult women (Sanghara & Wilson, 2006). It is assumed that they turn to children because of a lack of that adult sexual relationship. However, it has been shown that roughly equal numbers of contact sex offenders who target children were married as those that were unmarried or not in committed relationships (Elliott, Browne, & Kilcoyne, 1995; Groth et al., 1978). It has also been shown that contact sex offenders who target children, sexually abuse children at the same time they are involved in adult sexual activity (Groth et al., 1978). While these studies were conducted several decades ago, there is little evidence or theory to suggest contact sexual offenders who target children would be any different now, than they were then. However, there is a lack of research into these questions surrounding internet sex offenders. While Albright (2008) found that married people were five times more likely than single people to use the internet for sexual "hook-ups" and searching for serious relationships, Cooper et al. (2000) seem to argue that the internet provides a way for people with isolating paraphilias to thrive. Internet pornography also seems to provide a fairly easily accessible way for people in relationships to bridge fantasy and reality by trying what they see online with their partner (Albright, 2008). However, as those offenders with massive collections would have needed to spend a significant amount of time collecting and searching for SEMIC, more than likely to a detriment to their real world relationships (Ford, Durtschi, & Franklin, 2012), it was predicted that those offenders would not be in committed sexual relationships. As it would be difficult to transfer sexual feelings gained from SEMIC to adult sexual relationships, it was also predicted that those offenders with the more deviant content, would also likely not be in committed sexual relationships.

As predicted, when the marital status of the offenders was compared with the highest level of media found in the offender's collection, a significant

negative correlation was found (Kendall's tau-c = -0.285, N=27, $p<0.05$) suggesting that as the deviancy or severity of the SEMIC increased, the offenders were less likely to have been in a relationship. Contrary to predictions, however, no relationships were found between the other two deviancy measures (sex of the children and age of the children) in relation to the relationship status of the offender.

This is a potentially important finding for the assessment of risk. Relationship status or stability were identified in the meta-analyses (Hanson & Morton-Bourgon, 2005, 2009) as one of the dynamic risk factors associated with increased risk to recidivate in sex offenders. Added to that, deviant sexual interests, in this case possession of SEMIC depicting extreme S&M involving children, has also been associated with increased risk to recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005).

This could also be an important finding for the management and treatment of these offenders. If the reason for the offender's use of SEMIC is a result of relationship instability, treatment of the underlying issues or problems might help resolve the use of SEMIC. Similarly, should the offender encounter relationship instability in the future, this could be a trigger or a target for his use of SEMIC, which might be more visible to a practitioner.

5.3.4: Offender relationship status in relation to whether or not he produced SEMIC

As discussed above, it is a common myth that child molesters cannot be in committed adult sexual relationships and as a result they sexually abuse children (Sanghara & Wilson, 2006); where in actuality some child molesters sexually abuse children at the same time they are involved in adult sexual activity (Groth et al., 1978). The results from this sample seem to support that notion with a correlation suggesting that producers of SEMIC were likely to have an age appropriate sexual partner (Kendall's tau-b = 0.346, N=24, $p<0.05$).

These results were somewhat contrary to what others have found; Babchishin et al. (2011) reported in a meta-analysis that internet sex offenders are generally reported to be less likely to be in committed relationships or have

ever been in a committed relationship than the general public. Their meta-analysis however did not compare those internet sex offenders that produced SEMIC with those that only collected or distributed based on their relationship status, due to a lack of studies comprised of those variables. It is possible, then, that there might be a difference in relationship status between the producers, distributors or collectors of SEMIC.

However, just because an offender might be in a committed relationship does not necessarily mean that he is sexually intimate with his partner. This question was not directly asked by the criminal justice social workers and as a result, it was assumed that those offenders in committed adult relationships would be sexually intimate with their partners. If they were not, however, the lack of intimacy could potentially be seen as a gateway to problematic online sexual behaviour. Schneider (2000) reported that a decrease in sexual intimacy led to an increase in problematic online sexual behaviour. A few studies have found that with age and as the length of a marriage increases, the sexual intimacy that couples share with one another decreases (Lindau et al., 2007; Lodge & Umberson, 2012; Waite & Das, 2010). An earlier large study found that on average married couples that are between the ages of 19 and 24 have sex about 11 times a month, whereas couples that are between 40 and 50 years old have sex about 7 times a month (Call, Sprecher, & Schwartz, 1995); but at the same time as the marriage lengthens, the likelihood of the couples not being sexually intimate increases (there are more non-sexually active married couples that have been married 30 years, than those that have only been married 5 years). More research is needed to understand the relationship between sexual intimacy and internet sex offenders and more specifically between producers, distributors and collectors of SEMIC.

5.3.5: Offender attitudes in relation to quantity and deviancy of SEMIC

As discussed in section 5.1.2, criminal justice social workers reported on the attitudes and beliefs, about the crime, which offenders expressed at the time of conviction. While the distinctions are likely unimportant in relation to risk, these distinctions could be useful in helping with management and treatment

decisions. However, the criminal justice social workers did not appear to take into account how large or how deviant the offenders' collections of SEMIC were in relation to those attitudes or beliefs that they held. As one of the post-hoc questions, this thesis was exploring the potential relationships between those beliefs and behavioural characteristics, and how they might add to the treatment and management decisions. For example, an offender who was refusing to admit guilt to being in possession of one level one image depicting a 16 year old girl might be completely different in terms of suitability to treatment or even have completely different management requirements than an offender who was refusing to admit guilt for being in possession of 10,000 level 4 images depicting penetrative sexual acts between adults and 2 year old children. Similarly, the offender with one image might not express remorse for being in possession of that image and that attitude probably poses little concern when compared to that offender with 10,000 images if he was also failing to express remorse. This thesis is the first empirical study to look at how those offenders' attitudes (admission of guilt; admission of remorse/empathy; declared sexual interest in children) potentially relate to the size and deviancy of the offender's collection of SEMIC. Very few relationships were found. Those that were are discussed below.

Admission of guilt in relation to size and deviancy of SEMIC

There appears to be some contradictions in the literature with regards to denial and how it relates to both understanding a sex offender's motivations behind what he might have done and how it might relate to his risk to reoffend (Levenson, 2011). While meta analyses (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009) showed that there was no link between denial and recidivism, many criticisms have been raised about the effectiveness of the denial measure particularly relating to when it might have been asked and how it might have changed pre/post treatment (Lund, 2000). A more recent study (Nunes et al., 2007) found that denial does not increase the likelihood of recidivism in higher risk contact sex offenders, but actually raised it in low risk contact sex offenders. A post-hoc analysis within the same study found that the

relationship between the victim and the offender moderated denial and the offenders risk to reoffend (Nunes et al., 2007); more specifically offenders that knew their victims and denied abusing them were much higher risk to reoffend than the offenders that did not know their victims and denied abusing them. However, there has been little research into how an internet sex offender's denial of committing the offence might relate to what specifically he did. Yates (2009) argues that denial might actually be a normal coping mechanism and a way for the offender to process the severity of what he has done. She further suggests that the more extreme and serious the offence, the higher likelihood that the offender would express denial. Based on those assumptions, it was predicted that the offenders with the most deviant collections (highest rated images, male victims, youngest child victims depicted) and the largest collections of SEMIC would be the offenders who denied their guilt of committing the crime.

However, these predictions did not hold true as no relationships were found between the size or deviancy of an offender's collection of SEMIC based on the age of the youngest child or the highest rated image or video in relation to whether or not the offenders admitted guilt. Conversely an opposite correlational effect was found between the sex of the children and whether or not an offender admitted guilt (Kendall's tau-c = -0.531, N=25, $p<0.001$). This correlation suggests that the offenders with the most deviant images and videos (depicted boys) were the most likely to have admitted guilt. These results seems to contradict the assertions made by Yates (2009) and suggests another distinction between the more extreme contact sex offenders who target children and the more deviant internet sex offenders.

Expression of remorse in relation to size and deviancy of SEMIC

A recent meta analysis by Babchishin et al. (2011) found that online offenders were much more likely to have more deviant sexual interests as well as a higher rate of victim empathy or remorse for their crimes than offline contact sex offenders. Similar results were also found in a more recent study comparing internet only sex offenders to contact only sex offenders to those

that were a mix of the two (Elliott et al., 2013). In that study they concluded that mixed offenders were more similar to internet only offenders in terms of their higher sexual deviancy as well as higher level of remorse for the crime. However, there is a gap in the research looking into how internet offenders might be different in terms of remorse based on the level of deviancy of the SEMIC they possessed.

In this sample, a correlational relationship suggested that as the deviancy of the images or videos an offender possessed increased (based on the modified COPINE scale), the more likely they were to express remorse (Kendall's tau-c = 0.346, N=27, $p<0.05$). One possible explanation for these results could be that the offenders with the most extreme or deviant content were embarrassed or felt shame about what they were collecting and/or sexually attracted to and when they were caught that shame became remorse. Whereas the offenders with the less deviant or extreme content might have felt that what they were sexually attracted to or collecting was not shameful or wrong and as a result did not feel remorse when they were caught. This notion seems to fit with a theory postulated by Marshall, Marshall, Serran, and O'Brien (2009), in how self-esteem and shame modifies a sexual offender's cognitive distortions and feelings of empathy towards a victim.

Declared sexual interest in children in relation to size and deviancy of SEMIC

Beech et al. (2008) argue, in a literature review, that internet sex offenders fall into one of four categories most of which place a focus on sexualized interest in children. Seto et al. (2010) postulated that an offender who had a large collection as well as the most deviant content was most likely to have had a sexual interest in children as the reason for his offending behaviour. However, although they did not test that directly within the same sample of offenders, Seto et al. (2010) found that while their police sample of internet sex offenders had larger collections of more deviant SEMIC, there was no difference between that group of offenders and their sample of internet sex offenders who were being assessed in a clinical setting in terms of whether or not the offender declared a sexual interest in children.

A correlational relationship was found suggesting that offenders who possessed SEMIC depicting boys were more likely to have admitted having a sexual attraction to children than offenders who were only in possession of SEMIC depicting girls (Kendall's tau-c = 0352, N=25, $p<0.05$). While this particular relationship seems to confirm Seto et al. (2010) speculation, the lack of association between the other two deviancy measures and whether or not the offender declared a sexual attraction to children cast doubt on it.

5.3.6: Offender attitudes in relation to whether or not he produced or distributed

As discussed, it appeared as though the criminal justice social workers' assessment, understanding and classification of internet sex offenders was based on the offenders' attitudes and beliefs about the crime at the time of conviction as well as socio-demographic characteristics. They did, however, make one distinction in that they commented on when the offenders produced SEMIC. In those few cases they seemed to be arguing for much harsher punishments based solely on the fact that some of these offenders committed varying degrees of contact offences. These distinctions, however, were not in relation to the offenders' attitudes and beliefs relating to what they had done, but were rather purely based on the fact those offenders were convicted for production of SEMIC. They also did not assess or make mention of offenders who were distributing SEMIC when making their recommendations to the court for sentencing, or categorising the offenders for potential treatment programmes. As it has been argued earlier, an offender's attitudes and beliefs about the crime, or more specifically whether they admitted guilt, expressed remorse for their actions, or declared a sexual interest in children, might help to explain or expand the understanding of the offender's actions, or more specifically whether they produced or distributed SEMIC. The combination of the two might also help with further classification, management and treatment.

A correlation was found showing that offenders who produced SEMIC were more likely to admit guilt than offenders who were not producing SEMIC (Kendall's tau-b = 0.271, N=27, $p<0.05$). This association was expected, as it

would be difficult to deny being the producer of content in which the children depicted were related to or in the care of the offender who was in possession of those image or videos. This was similar to what Sheehan and Sullivan (2010) found in that all of their SEMIC producing offenders admitting to producing the images and videos.

A relationship was also found suggesting that offenders who produced SEMIC were less likely to have declared a sexual interest in children (Kendall's tau-b = -0.271, N=27, $p<0.05$). This result was unexpected as it suggests that the production of SEMIC was not done for a sexual purpose. While these offenders might fit the regressed contact offender who targets children type (Finkelhor, 1984), capturing the abuse via image or video does not really fit with the modus operandi of those types of offenders. Regressed contact offenders who target children typically are not sexually attracted to children and the abuse is usually due to some other trigger or psychological stressor (Finkelhor, 1984). However, having the foresight to set up a camera or to plan the abuse would not lend itself to the idea of a stressor triggering the abuse and actually fits better with the notion of a fixated contact offender who targets children.

There are two other possible explanations for the offenders' denial of being sexually attracted to children and yet producing child sex abuse media. One of which was discussed in section 5.3.2, deals with the age of the children depicted in the SEMIC as well as potentially the age of the offender. As already discussed with regards to this sample, the offenders that were producers were likely to be in possession of SEMIC in which the youngest child depicted victims were in the later stages of puberty. It could be that those offenders that were producers did not think that the children that they abused in the images and videos were actually children. This notion would need to be explored more. Similarly, as was discussed, the age of the offender in relation to the age of the victim could also explain why the offenders denied being sexually attracted to children; they might actually be close to being classified as children themselves. This was potentially the case for one of those offenders who was a teenager and producing SEMIC.

The other possible explanation for why an offender might produce SEMIC but not be sexually attracted to children, deals with the commercialisation of SEMIC. As discussed earlier, sexually explicit media involving children has both a monetary value as well as act like a currency in themselves (Estes, 2001). It could be that the offenders were producing the SEMIC for pure monetary gain. However, if that was the case, it would be expected that those offenders would also be distributing the SEMIC, so they can make money. But in the case of this sample, only two offenders were producers as well as distributors of SEMIC, making this explanation less likely. More research is needed to understand why offenders might produce SEMIC, while at the same time claim that they are not sexually attracted to the children they abused.

As discussed previously, Sheehan and Sullivan (2010) found that there were two types of producers, those that shared (distributed) the SEMIC that they created and those that did not. While all the offenders in their study distributed some images, they were interested in potential reasons as to why some offenders shared their self produced SEMIC and why some offenders chose not to share what they produced. They suggested that fear of detection and the desire to want to stay in control of who had access to their produced SEMIC were the two main reasons why their non-sharing producers did not share the SEMIC they created. However, perhaps some other attitudes or beliefs, like guilt or remorse, limited their inclination to distribute their produced SEMIC. While those attitudes and beliefs were tested for this sample of internet sex offenders, only two offenders produced and distributed SEMIC, which is not enough for any statistically analysis. It is also not possible to know whether or not those two offenders distributed the images they produced, or if they only distributed other images they collected. Further research into this question would prove valuable.

5.3.7: Risk Matrix 2000 and Stable Acute 2007

One of the aims of this thesis was to explore what information practitioners routinely collected on internet sex offenders and how that might

be important to the assessment of risk to recidivate among internet sex offenders. Due to many design restrictions, information was not collected on which offenders (if any) actually recidivated in this sample, limiting the analysis to a theoretical perspective. The scores or ratings assigned to the offenders based on actuarial risk assessments tools in the SERs were collected and the distributions of scores appeared as expected.

RM2000

In this sample of internet sex offenders, the distribution based on the RM2000 scores reported in the SERs were slightly skewed to the very high risk to reoffend side with 32% rated a medium risk to reoffend, 40% rated a high risk and 28% rated a very high risk to reoffend. The overall mean score for the sample was 3.38 (high risk), where the median score was 3 (high risk) and the standard deviation was 1.016. This was expected given the RM2000 weights heavily on whether or not an offender is considered to have deviant sexual offending tendencies (see Chapter 2, section 2.2.2). This includes deviant factors such as non-contact offences, male victims and stranger victims. For every two of those deviant tendencies that an offender has, the level of risk based on the tool, goes up a category. If they have all three of those deviant tendencies, as well as being single, the predicted level of risk goes up two categories. However, because internet sex offending, or the collection of sexually explicit media involving children, is non-contact in itself and that the significant majority of internet sex offenders do not know the children depicted in the images and videos they possess, by default the lowest score that internet sex offenders can be rated by the RM2000 is medium risk to reoffend.

Stable and Acute 2007

As described in Chapter 2, section 2.2.2, static risk assessment tools account only for factors in the past that cannot normally be changed, for example an offender's criminal history, or whether or not he is a psychopath or a paedophile. While these factors have been good at predicting long term risk to reoffend, they do not account well for short term or cyclical reoffending patterns (Seto, 2013). Dynamic actuarial risk assessment tools, however, are

better at addressing those short to medium term risks, which can be changed or modified. For example, Hanson and Morton-Bourgon (2005) found that alcohol misuse is a long term risk factor for reoffending of both sexual and non-sexual offenders; drinking or being intoxicated then would be a short term or dynamic risk factor for reoffending that could be changed or modified with proper management.

The Stable and Acute 2007 (Hanson et al., 2007) is one of the newer dynamic actuarial risk assessment tools that has been developed to assess the short to medium term risk of sexual offenders reoffending. As this tool was first available and recommended for use in Scotland around 2007, it was of no surprise that in this sample only 11 of the 30 SERs made mention of the rating. Of those eleven offenders, three (27%) were rated a low risk to reoffend, five (46%) were rated a medium risk to reoffend and three (27%) were rated a high risk to reoffend. These were fairly normally distributed, as would have been expected.

Relationship to deviancy and quantity of SEMIC possessed

As discussed in more detail in Chapter 2, section 2.2.2, the inclusion of sexual deviancy factors that include all internet sex offenders likely suggests that the RM2000 overestimates the level of risk internet offenders will recidivate. The skewed RM2000 risk ratings suggest that the criminal justice social workers in Scotland followed the guidelines for assessing internet sex offenders utilizing the proscribed deviancy measures, but potentially ignored other characteristics that could have better distinguished the deviant sexual preferences of this offender group. One of the post-hoc research questions assessed the relationship between the risk level predicted and how deviant those offenders' sexual interests appeared to be based on their collections of SEMIC.

It was predicted that there would be a correlation suggesting that as the offender's collection of SEMIC got more deviant (based on the age of the youngest child depict, the sex of the children and the severity of the highest rated image or videos), the greater the likelihood that he would be rated a very

high risk to reoffend. However, no correlational relationships were found and the distributions (while not significant) pointed towards the opposite effect; as the offenders' risk ratings increased, the deviancy of their collections of SEMIC decreased.

Another post hoc research question assessed the potential link between the quantity of images and videos an offender possessed and the level of risk he was predicted to be. As discussed, having a high sexual preoccupation has also been found to increase the likelihood a sex offender will recidivate (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). Given that offenders who have large collections of SEMIC would have had to have spent a considerable amount of time collecting (which could indicate an increased sexual preoccupation), it was predicted that there would be a positive correlation found between the size of an offender's collection of SEMIC and the risk rating he was given by the criminal justice social workers. However, an opposite affect was found (Kendall's tau-c = -0.336, N=25, $p<0.05$). The negative correlation showed that as the size of an offender's collection of SEMIC increased the likelihood of him being rated a high level of risk to reoffend decreased.

Both of these are fairly substantial findings, given that theory and empirical data suggests that deviant sexual interests and increase sexual preoccupation are the best predictors of sexual recidivism for all sex offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005, 2009). More research is needed, however, to assess whether or not possessing large quantities of more deviant SEMIC increases an internet sex offenders risk to recidivate as there has not been any substantial research into what (if any) factors relate to an increased risk of sexual recidivism for internet sex offenders (Seto, 2013).

5.4: Implications for criminal justice social work practice

As discussed previously, criminal justice social workers in Scotland deal with internet sex offenders on a few different levels. They have a legal

requirement to assess offenders and make a recommendation to the court on sentencing. They are also usually the ones responsible for the treatment and management of offenders both in prison and in the community setting. However, sex crimes committed with the aide of the internet or technology are fairly new, but the number of convicted internet sex offenders has increased exponentially within the last decade (Wolak & Finkelhor, 2013). Theory and research, however, have started to capture how this class of sex offender aligns within the context of risk theory and assessment, only within the last three years (Seto, 2013). This has left criminal justice social workers having to make several choices related to the assessment of risk and management of internet sex offenders.

5.4.1: Assessment of risk

Current practice

Fundamentally criminal justice social workers have had to choose whether or not to apply the same protocols used to assess and manage contact sex offenders to internet sex offenders. Research into criminal justice social work practice (Davidson, 2007) suggests most if not all practitioners in Scotland make that choice, intrinsically assuming that they are similar offenders with similar levels of risk and similar management needs. This is supported by the results of this study and is expected given there is an extensive body of literature on the risk contact sex offenders pose to reoffend, what factors mitigate that risk and how to assess it (Hanson & Bussière, 1998; Hanson & Harris, 2001; Hanson et al., 2007; Hanson, Morton, & Harris, 2003; Hanson & Morton-Bourgon, 2005, 2009; Hanson & Thornton, 2000). This makes contemporary assessment an objective process.

Contact sex offender assessment

As mentioned above, there is an extensive body of literature on the risk contact sex offenders pose to reoffend, what factors mitigate that risk and how to assess it (Hanson & Bussière, 1998; Hanson & Harris, 2001; Hanson et al., 2007; Hanson et al., 2003; Hanson & Morton-Bourgon, 2005, 2009; Hanson &

Thornton, 2000). This process has evolved over time with extensive research and many different generations of assessment strategies (see Chapter 2, section 2.2.2 for a detailed discussion). Historically, practitioners relied on professional clinical judgment to assess which offenders were more likely to reoffend than others. This practice varied from practitioner to practitioner and could have been loosely or strictly applied depending on experience, knowledge, and the amount of information gathered about the offender as well as how much weight was given to each piece of information gathered (Hart, 2001). This could have led to different practitioners considering the same offender to be at different levels of risk to reoffend after assessment. To compensate for that variability amongst practitioners, actuarial risk assessment tools were created, suggesting which information to collect or ignore and also applied an actuarial model to the information collected adding weight to specific variables that were statically proven to predict recidivism on a contact sex offender population (Thornton, 2002). Contemporary and current literature and research suggests that utilizing actuarial risk assessment tools is a statistically more accurate method for predicting the likelihood that a contact sex offender will reoffend than practitioners relying solely on professional clinical judgment (Hanson & Bussière, 1998; Seto, 2013).

The empirical research (Hanson & Bussière, 1998) that several of the 1st generation actuarial risk assessment tools (RM2000, Static 99) are based on identify several static risk factors that have been shown to predict offender recidivism with statistical accuracy. These are important to the assessment of contact sex offenders as these factors are static and do not change. The static factors that appear most important are:

- **Having deviant sexual interests** such as being sexually attracted to children, having male victims, having victims not known to the offender, having committed non contact sexual offences
- **Having a prior history of sexual offending**
- **Being under the age of 25 when the offence was committed**

These characteristics are measured and an actuarial formula applies weight to the significance of each factor in predicting an offender's likelihood to

recidivate. This method has been shown to give an accurate predictive baseline for contact offenders (Harris & Hanson, 2010).

Current research also suggests that the fourth generation actuarial risk assessment tools are more accurate at predicting short, medium and long-term risk that contact sex offenders will recidivate than the earlier generation tools (Seto, 2013). These fourth generation tools incorporate the weighted static factors found to statistically predict recidivism risk for contact offenders of the earlier generational tools with stable dynamic and acute dynamic factors found in the later generational tools (Hanson & Morton-Bourgon, 2009).

Assessment issues with the assumption internet sex offenders are the same as contact offenders

As already mentioned, Davidson (2007) suggests current practice in Scotland for criminal justice social workers is to assess internet sex offenders identically to contact offenders who target children. This includes utilizing the RM2000 and the Stable/Acute 2007 to formulate the bulk of their analysis. There are several issues with this procedure, chiefly the assumption that internet and contact offenders who target children are the same type of offender.

The most current research suggests that internet sex offenders are different from contact sex offenders not only in terms of their risk to reoffend, but also in relation to their offending behaviour, their demographic characteristics and the attitudes they hold about the crime. Seto et al. (2011) reported in a meta-analysis of 24 samples, albeit with a very short longitudinal time frame (M=3.4 years), that internet sex offenders recidivate at much lower rates than the average sex offenders. Seto et al. (2011) reported that approximately only 5% of internet sex offenders reoffended with some type of sexual offence (3.4% for new internet sex offence; 2.1% for new contact offence), whereas Hanson and Morton-Bourgon (2005) reported that 13.7 % of general sex offenders reoffended. Faust et al. (2014) found that internet sex offenders were more likely to have had higher educational attainment and no criminogenic history and no history of substance abuse when compared to

contact offenders who targeted children. Babchishin et al. (2014) found in a meta-analysis of 30 samples that internet sex offenders were more likely to have a higher sexual preoccupation, more deviant sexual interests, lower anti-sociability issues and greater psychological barriers to sexual offending (increased remorse and guilt) than contact offenders who target children. These more recent studies add to the growing evidence that internet sex offenders are different to contact sex offenders who target children. These data have clear implications for the current way internet sex offenders are assessed for recidivism risk.

A more practical issue with assessing internet sex offenders in a similar/identical way to contact offenders who target children is the use of the actuarial risk assessment tools themselves. As previously discussed, the Risk Management Authority in Scotland recommends that practitioners assess all sex offenders, including internet sex offenders, for recidivism risk utilizing the RM2000 as well as the Stable/Acute 2007 (Davidson, 2007). Neither of those tools, nor the weighted characteristics that they statistically measure, has ever been validated on a sample of internet sex offenders. This is especially problematic given these tools add extra weight to factors likely to include all internet sex offenders.

The RM2000 (Thornton et al., 2003) adds the most weight to the deviancy factors: having male victims, having stranger victims and having committed a non-contact offence. Not all contact sex offenders have deviant sexual interests that match those characteristics (Hanson & Morton-Bourgon, 2005), which is likely one of the reasons for their strong predictive validity on a contact sex offender population. However, most if not all internet sex offenders could be described as having those deviant sexual interests (Seto, 2013). This added weight likely over-estimates the overall risk internet sex offenders pose to recidivate as current research suggests that internet sex offenders reoffend at rates much lower than contact offenders who target children (Seto et al., 2011). This was a trend observed in this sample as the RM2000 scores were skewed suggesting most of the internet sex offenders were a high risk to re-offend.

The age of a contact sex offender when he commits a sex crime has been found to be one of the only static demographic characteristics capable of predicting future likelihood of recidivism (Hanson & Bussière, 1998). When considering all contact sex offenders together, the younger offenders, or specifically those under the age of 25, have been found to be significantly more likely to reoffend than those offenders who are older (Hanson & Bussière, 1998). Generally, it has been found that the same holds true for contact offenders who target children (younger offenders are a higher risk to reoffend), however, the age of the child victims has been associated with a mitigated risk (Lööf, 2012; Moultrie, 2006). Young contact offenders who target children that are similar to their own age have not been found to be as high a risk to reoffend as young offenders who target children significantly younger than them (Seto & Lalumière, 2010).

Internet sex offenders, nevertheless, have been found to be different both in terms of risk to reoffend as well as their age at offence. Contrarily to what was found in this sample of internet sex offenders, Seto et al. (2011) reports in a meta-analysis of 9 internet only offender samples, that the mean age of these offenders is younger than both contact offenders who target children and dual offenders (both contact and internet), and as already discussed Wolak et al. (2011) found that average age of internet sex offenders is decreasing. If practitioners were to utilize the same protocols and tools for internet sex offenders as they do for contact offenders (RM2000), this lower average age for internet sex offenders would suggest that as a group they are a much greater risk to recidivate than contact offenders. This, however, contradicts what Seto et al. (2011) found in terms of actual recidivism rates for internet only offenders; they reoffend at rates much lower than contact offenders who target children.

These issues with the predictive validity of recidivism for internet sex offenders based on the scores obtained from the RM2000 and the Stable/Acute 2007, have led to several researchers, including the actuarial risk assessment tools authors, to strongly advise against using these particular tools on a purely internet sex offender population (Seto, 2012). This also leaves practitioners

with a very practical problem of having to not only distinguish internet sex offenders from contact sex offenders, but also having to make distinctions between different internet sex offenders in some discernable way.

Suggestions for internet sex offender assessment

Knowing that some internet sex offenders, albeit a small group, are a higher risk than others to reoffend, but not knowing which ones or how to distinguish them poses a problem for criminal justice social workers in Scotland. As of yet, no actuarial risk assessment tools have been created specifically for internet sex offenders and it is not yet known which factors, if any, might hold more significant weight for recidivism risk (Seto, 2013). This leaves practitioners having to choose whether to use potentially inaccurate actuarial risk assessment tools, modify those assessment tools or completely fall back onto structured clinical judgement.

One possible solution to the lack of actuarial risk assessment tools, which seems to be yielding some statistically promising results, is to modify existing static risk assessment tools. Barnett, Wakeling, and Howard (2010) used a modified RM2000, where they excluded the deviancy factors (male victims; stranger victims; non-contact offence) and found that it significantly predicted contact offences. In a follow up study, Wakeling et al. (2011) found that the Offender Group Reconviction Scale 3 (ORGS3) (Howard, Francis, Soothill, & Humphreys, 2009), in tandem with the modified RM2000, significantly predicted sexual recidivism as well as general criminal reoffending. However, neither of those studies were able to predict accurately which offenders were most at risk to reoffend online only, which is similar to what has been reported by others (Eke, Seto, & Williams, 2011; Seto, 2013; Seto et al., 2011).

This thesis has identified several behavioural and demographic characteristics, as well as offender attitudes about the crime prior to sentencing, that might help to distinguish between different offenders that collect and share SEMIC. While it is not known how significant or what the weighting each of these characteristics should have in relation to his risk to reoffend, having information related to these characteristics might be useful for structured

clinical judgement. While this thesis did not assess recidivism rates, some other studies have suggested some of these characteristics might be relevant (Faust et al., 2009; Seto et al., 2010; Wakeling et al., 2011). These characteristics are specifically:

- Having deviant sexual interests, evidenced by: possessing SEMIC depicting very young children, boys or sexual acts involving penetration, bestiality or torture
- Having a high sexual preoccupation, evidenced by: possessing large collections of SEMIC, possessing large quantities of SEMIC in relation other pornographic material, spending a considerable amount of time searching for/collecting SEMIC
- Having specific offending behaviours such as: organized collections of SEMIC, the use of encryption, password protection or other means of hiding images or videos, being involved in the social or sharing aspect of SEMIC
- Having a history of contact offences against children
- Being under the age of 25 years old
- Having any criminal history
- Being single or having never been in a long term committed relationship
- Having a low educational attainment
- Lacking offending barrier attitudes: failure to admit guilt or express remorse
- Having a sexual attraction to children: evidenced either by admission or being in possession of large quantities of SEMIC

Seto (2013) points out that actuarial risk assessment tools are more accurate at predicting recidivism, as certain statistically derived risk factors could hold more weight and inexperienced practitioners might not be able to control for or properly calculate using structure clinical judgement. The lack of research or knowledge relating to which characteristics or factors should carry

the most weight, nevertheless, supports the argument for the use of structured clinical judgement until more about this particular offender group is understood. An assessment inventory utilizing these characteristics, with the potential to distinguish between internet sex offenders who collect and/or share sexually explicit media involving children can be found in Appendix D. While untested, this assessment inventory should provide some structure for practitioners when assessing internet sex offenders and what behavioural, demographic or attitude characteristics might be important when collecting information and coming to any conclusions.

5.4.2: Management of Internet Sex Offenders

As previously discussed, this study found that criminal justice social workers were making the same sexual offence prevention order (SOPO) restriction recommendations that were challenged in numerous court cases: restricting access to the internet except for education or employment, prohibiting the ownership or use of image capturing technology and prohibiting unsupervised access to children under 18 years old. This was likely the default position that erred on the side of caution resulting from the lack of evidence as to which restrictions are the most effective. However, the courts have ruled these to be overly restrictive and unjustified. This thesis has found that distinctions can be made between internet sex offenders based on their offending behaviour, demographics and the beliefs they held about the crime. Utilizing information related to the offender's behaviour could provide a more offender specific approach to their community-based management.

Use of technology and the internet

A blanket ban on technology and/or a prohibited use of the internet is no longer allowed for internet sex offenders (see Chapter 2, Section 2.3). Restrictions on an offender's use of the internet or ownership of technology must not only be justifiable based on risk, but also enforceable and practical. It has been ruled that it is neither practical nor enforceable to prohibit an offender's use of the internet or to prohibit his use or ownership of technology

capable of taking images. The courts have suggested narrower restrictions on technology or internet use are more manageable and more efficiently enforced (Akdeniz, 2008).

This thesis has argued that information relating to the offenders' behaviour could be important to his management, as offenders who are likely to reoffend are likely to do so in a similar fashion (Parker, 2004). For example, offenders who use encryption to try to hide their collection of SEMIC from others likely have the skills and knowledge to do it again. Similarly, offenders who are active in the sharing or trading of SEMIC, perhaps for social reasons, might resort to the same behaviour if the reasons behind the participation are not addressed. A more targeted use of resources would see criminal justice social workers focusing on these behavioural characteristics when making their SOPO recommendations for restricted technology or internet use.

For the offenders who have a history of using encryption or hiding techniques, criminal justice social workers could recommend that SOPOs ban their current use and then regularly check the contents of the offender's computer and other devices for illegal content. Similar restrictions could be placed on the use of social media by offenders who have a history involving the social aspects of sharing SEMIC. Practitioners could also recommend that offenders who have a history of only storing their SEMIC on external devices (which can easily be hid) have SOPOs prohibiting the offender's use of external storage media. This restriction could go further and prohibit the offender from owning or using technology that is capable of saving files to external media, thereby making it easier for the practitioner to search all the files stored on the offender's computer. Offenders who have a history of creating SEMIC through computer morphing technology could be banned from that particular use.

Access to children

As previously discussed, criminal justice social workers recommended that all of the internet sex offenders in this sample were, or should be, prohibited from having unsupervised access to children. This recommendation appeared to be based solely on the fact that they were sex offenders and it

ignored any specific behavioural, demographic or attitude characteristics that could have distinguished them. This default position, while safest in terms of mitigating potential risk, might be overly cautious at the expense of disruption to family life. However, an alterative utilizing the characteristics that distinguish the offenders involves a complicated mix of several relationships.

Very few internet only sex offenders go on to recidivate or commit contact offences (Faust et al., 2014; Seto, 2013; Seto & Eke, 2005; Seto et al., 2011). However, several studies have found that dual offenders (internet and contact) are a higher risk to reoffend than internet only offenders (Babchishin et al., 2014; Faust et al., 2014). Several studies (Babchishin et al., 2014; Long et al., 2012; McCarthy, 2010) have also found dual offenders are more selective in the type of SEMIC they possess, both in terms of the age and sex of the children depicted as well as the severity of the content, than internet only offenders. Long et al. (2012) found a further connection between the types of contact offences committed and the types of SEMIC the offenders possessed, with sadistic penetrative dual offenders possessing more level 4 and 5 SEMIC and less level 1 than sexual touching dual offenders. They argued the types of SEMIC possessed were likely related to what they were sexually aroused by and probably played a significant role in their sexual fantasies and were tied into their contact offences. Several studies (Babchishin et al., 2014; Long et al., 2012) have also reported that dual offenders are more likely to have had access to children than internet only offenders. Yet, internet only offenders were also reported to have had more psychological barriers (increased guilt and remorse) than dual offenders (Babchishin et al., 2014), which was argued to have limited their behaviour to non-contact offences.

These studies suggest a complicated relationship between demographic, behavioural and attitude characteristics in relation to which offenders might commit contact offences against children to whom they have access. Practitioners could utilize the information related to an offender's collection of SEMIC to establish what he is sexually aroused by and overlay that profile to any children to which he might have access to. Should there be a match, an assessment can then be made as to whether or not the offender is likely to have

any psychological barriers that would inhibit his move from internet only to contact offences. Demographic and social circumstances could also be assessed as to whether or not any dynamic risk factors (social or life instability) might increase the offender's likelihood to commit a situational offence. Taking this approach or one similar would make any decisions to prohibit that offender's access to children specific to that offender.

Treatment

While some research has suggested that the majority of internet sex offenders, irrespective of treatment, will not go on to reoffend (Seto, 2013), some internet sex offenders will go on to commit new crimes. This leaves criminal justice social workers needing to make a choice about the treatment needs of all internet sex offenders. As discussed in the Chapter 2, they can either place internet sex offenders in treatment programmes designed for contact sex offenders, utilizing mixed groups (contact and non-contact offenders); modify an existing programme for use with only internet sex offenders; or utilize one of the newer programmes (i-STOP for example) designed exclusively for internet sex offenders. Conceptualizing how practitioners made those decisions was beyond the scope of this research. Consequently, the current literature would suggest specific details about the offender's behaviour is important in deciding which approach is most appropriate (Henry et al., 2010; Middleton, 2008; Seto, 2013), which is information the criminal justice social workers did not seem to collect or take into account for this sample. Middleton (2008) argues that offenders who have a history of contact offences or who have created SEMIC by actively or passively abusing a "real" child, are likely better suited in a longer treatment programme designed for contact sex offenders. He also argues that offenders who have large collections of the most deviant content (images/videos depicting penetration or sadistic acts, young children and/or boys) are also likely suited for the lengthier contact offender-based programmes. This leaves the modified programmes and the programmes created specifically for internet sex offenders best suited to those offenders who

have only collected or shared SEMIC and whose collections are small and of a less deviant nature.

Irrespective of specific details relating to what the offenders did, the attitudes he held about the crime, and some of the social or situational circumstances surrounding why he might have committed the crime, will likely need to be addressed. This was information collected by the criminal justice social workers in this sample. For example, stable and acute dynamic risk factors, like work or relationship instability (Hanson et al., 2007), have been found to increase the likelihood contact sex offenders will recidivate (Hanson & Morton-Bourgon, 2009) and are addressed in treatment programmes for both contact and internet sex offenders (Hudson, 2005; Middleton, 2008). Similarly, the cognitive distortions an offender might hold and any expression of denial (Levenson, 2011) or failure to express remorse for the victims (Hudson, 2005) are also addressed in both types of programmes (Seto, 2013).

While current research now suggests internet only sex offenders are different from contact sex offenders who target children both in terms of characteristics that describe their offending behaviour, demographics and the attitudes they held (Babchishin et al., 2014; Faust et al., 2014), little is known about which risk factors are specific to internet sex offenders. This makes any treatment programme experimental as they have not been proven successful by longitudinal studies. Seto (2013), however, argues this is the normal progressive course in criminology and forensic psychology, and future research will provide a more positive outlook.

5.5: Limitations

5.5.1: Sample limitations

This sample captured all of the convicted internet sex offenders in a particular region of Scotland for a 7 year period. While this sample was similar to other samples of internet sex offenders in other regions of the world (Carr, 2004; McCarthy, 2010; Quayle & Jones, 2011; Seto et al., 2010; Webb et al.,

2007), the same limitations apply to this sample that apply to those. Only convicted offenders were used. There could be, and most likely is, a much larger sample of people in that particular region of Scotland that collect, distribute and/or produce SEMIC, but have not been caught. These "offenders" are inherently different from the offenders in this sample, as they have not been caught. This could be because they are employing completely different methods, which allows them to avoid detection, or it could be down to luck. It is not possible to know if these "uncaught offenders" are different to the caught offenders on any of the measures used in this research. This is a common limitation to criminological research and not exclusive to this type of offence.

Similar to contact sexual offending against children, internet sex offending is a crime committed almost completely by males (Seto, 2013). It has been estimated that female perpetrators account for roughly 5% of sexual abusive committed against children (Grayston & De Luca, 1999). While there is some suggestion that female contact sex offending against children is severely underreported (Cortoni & Hanson, 2005), I am unaware of a single case (outside of teenage sexting, which could be argued is different) that involves a female, by herself, collecting, distributing and/or producing SEMIC. There are, however, documented cases of female offenders, working with a male partner, to commit sexual offences against children and in some instances producing SEMIC in that act of that offence (Seto, 2013). This sample was comprised exclusively of males, which was representative of the Scottish internet sex offending population, as no females have been convicted. However, as discussed above with regards to uncaught collectors, distributors and/or producers of SEMIC, there could be females that have yet to be caught.

Sample size

While all of the convicted internet sex offenders in a particular region of Scotland for a 7 year period were used, the number of offenders that made up the sample was fairly small. This was particularly problematic with the criminal justice social work subset, where more than half of the corresponding SERs to match the forensic reports were not able to be located (see the Methods chapter

for an explanation). This had implications for the types of statistical analyses that could be used, as many of the correlational tests have minimum cell sizes. This could have led to increased chances of false negatives or type two errors. However, the tests chosen, mainly Kendall's tau, can accommodate small cell sizes (Kendall, 1938) and this was not a limitation. Conversely, the small sample size was problematic in some instances when attempting to compare some of the offending behaviour characteristics with some of the demographic characteristics. In those cases, some of the cells contained only one offender making statistical comparisons impossible.

Although the size of this sample was similar to some of the other studies assessing characteristics of internet sex offenders (Bates & Metcalf, 2007; Sheehan & Sullivan, 2010; Sheldon & Howitt, 2008), caution needs to be taken when generalizing the results to a much large population. There is no research to suggest that Scottish internet sex offenders are largely different to internet sex offending populations in other Western countries. Nevertheless, the small sample size, particularly in respect of some of the demographic characteristics, could have skewed these results in one direction or another.

5.5.2: Reliability and Validity

The reliability of the police forensic reports and the social enquiry reports were both limitations for this research. Both types of the reports were taken as fact, as both were submitted to, and used by, the courts in legal proceedings. Nevertheless, as already mentioned there could have been accuracy issues with both reports. For the police forensic reports, determining the age and sex of the children depicted in the images and videos is a subjective process that could be liable to human error (Cooper, 2011; Cooper & Jones, 2007), especially when not all the images or videos clearly depict the children's genitalia. Accurately and efficiently assessing the content of every image and video by the police in some of the very large collections, would have taken a considerable amount of time, potentially exacerbating the chances of error.

The SER's potentially had more subjectivity issues than the forensic reports, as they relied almost exclusively on interviews with the offenders. In

order for the criminal justice social workers to accurately characterise the offenders in the reports, the offenders needed to be truthful in answering the questions of the practitioners. A meta-analysis of 24 studies (Seto et al., 2011) found that there was a significant difference between official offending records for previous contact offences of internet sex offenders and later self reports. Bourke and Hernandez (2009) found that occurrences of previous contact offences significantly increased for internet sex offenders when based on self reports post-treatment than using official reports. This suggests that there might be some potential variability in some of the characteristics describing internet sex offenders depending on when the reports were produced and where the information was sourced. This could be particularly problematic for the SERs as they were compiled post-conviction but presentencing, so the offenders might have been trying to influence their sentence with the answers given for the reports.

Another limitation to use of the forensic and social enquiry reports as a data source, was the reliability and consistency between them. It is likely the reports were compiled by different police officers and different criminal justice social workers. The skill levels between each of the different professionals and how accurate the reports were when compared with one another, could have affected the overall results. It is not known how many different practitioners authored the reports, but the variance would be expected to be greater with the SERs than the forensic reports as the SERs came from three different local authorities compared to the one police force.

5.5.3: Limitations of statistical tests used

The gold standard aim of scientific experimentation is to find causation. That is to be able to be able to claim that manipulating *A* directly modifies *B* in a particular way. A causal relationship for internet sex offenders might suggest that increasing the time spent collecting SEMIC causes an offender to escalate to more deviant content. In real world social research, it is difficult to establish causation as there are too many external variables to control for, each which

may affect or modify the relationship between the desired two variables (Robson, 2002).

This thesis, however, was able to assess only the statistical relationship between two variables, stopping short of being able to claim causation. While it was possible to describe the observed relationship (or lack of) between two of the variables reported in this thesis, it is not possible to say with certainty that there was not a third, fourth or even a fifth variable that acted as an intermediary between that relationship. This is a limitation of not only this research, but most if not all, social real world research.

Chapter 6: Conclusion

The use of the internet or other technology to aide offenders in the collection, distribution or production of sexually explicit media involving children (SEMIC) has grown exponentially in the previous decade in tandem with the number of offenders convicted of crimes related to those behaviours in developed countries (National Center for Missing and Explioted Children, 2012). Empirical research, consequently, has not been as fast to progress, leaving questions as to whether or not internet sex offenders are similar to contact offenders who target children in terms of the risk they pose to recidivate and what management decisions might mitigate those risks. Assuming they are the same type of offender but at different stages of their offending career, implies that most if not all internet sex offenders would, without intervention, progress to contact offences against children (Webb et al., 2007). This also implies that the same characteristics (or factors) that have been found to increase the likelihood of recidivism for contact offenders also likely apply to internet sex offenders and the same interventions or management strategies would also be appropriate (Seto, 2013).

It appears as though practitioners in Scotland (mostly criminal justice social workers) have been working under that assumption, that internet sex offenders are similar if not the same to contact offenders in terms of their management and risk assessment. This was evident in the empirical research of this study as well as being evidenced by the guidance provided by the Risk Management Authority in Scotland (Davidson, 2007), which recommends practitioners use the Risk Matrix 2000 and the Stable/Acute 2007 for the assessment of all sex offenders, internet included.

This is problematic given that the tools mentioned have never been validated on and were not specifically created for offenders who had not committed contact offences (Seto, 2013). This has likely led to decisions about the treatment and management of internet sex offenders being made with

unproven tools. More recent studies (which were not available at the time of developing and conducting this research) imply that internet sex offenders are very different in terms of levels of risk they pose; very few actually reoffend after being caught (Seto, 2013).

The law ("Civic Government (Scotland) Act," 1982) and sentencing guidelines used in England and Wales (SGC, 2003) suggest that internet sex offenders are not solely a unique group in themselves, but rather can be further divided by whether or not they possessed, distributed or produced sexually explicit media involving children. Others have furthered those classifications of internet sex offenders based on their offending behaviour (Alexy et al., 2005; Durkin, 1997; Elliott & Beech, 2009; Hartman et al., 1984; Krone, 2004; Quayle & Taylor, 2003), or based on the offender's beliefs or characteristics that described their social situations (Cohen et al., 1969; Groth et al., 1978).

At the point when the research for this thesis was initiated, very little was known about how the characteristics of the offender's behaviour, or the offender's beliefs, social motivations and history, might affect an offender's risk to reoffend or mitigate how that offender should be managed. Similarly, little was known about what information practitioners were collecting and using to inform those judgements. As a result, this thesis aimed to address some of those questions by exploring:

- what information was routinely collected on internet sex offenders by criminal justice social workers and the police,
- how this data described these offenders,
- the relationships between selected elements of the data collected,
- how these relationships might affect or mitigate the risk the offender poses to reoffend as well as the management of that offender

This research provides a basis for better-informed practice in terms of the assessment and management of internet sex offenders by suggesting what information should be collected. It also helps to inform future studies seeking to

distinguish which variables or characteristics are most important or carry the most weight when determining the risk internet sex offenders pose to reoffend.

6.1: Empirical findings

This thesis contributes to the limited body of knowledge relating to this offender group by showing that a sample of internet sex offenders in Scotland are similar to other samples in different countries in relation to their behaviour, the demographics that describe them and in limited respects their attitudes. This research also shows that those same characteristics not only differentiate them from contact offenders who target children, but also from one another.

6.1.1: Police subset

While the police likely collected a range of information relating to internet sex offenders, the main report that they produced for the courts - the police forensic reports - contained mostly information pertaining to the offending behaviour of the internet sex offenders. The reports detailed information pertaining to the number of illegal images and videos offenders possessed, as well as the content of the images and videos relating to the age and sex of the children depicted, and how severe the content was based on the modified COPINE rating scale. The reports also indicated where the SEMIC came from, how the offender chose to store it, and whether or not the offender attempted to hide it. The reports also discussed whether or not the offenders produced the images or videos and whether or not there was a history of distribution or sharing. The offenders' criminal histories were also reported as well as well as their age at the time the offence occurred.

This sample of internet sex offenders had more deviant sexual interests and likely had a more intense sexual preoccupation than contact offenders who target children. This was evidenced by the average number of illegal images and videos possessed as well as how deviant those images and videos were on three different measure: the age and sex of the children depicted and how extreme the sexual acts depicted based on the modified COPINE scales. While this

increased deviancy and sexual preoccupation seemed to be salient with what has been reported in other samples of internet sex offenders (Long et al., 2012; Seto et al., 2010; Wolak & Finkelhor, 2013; Wolak et al., 2011), the range provided by the offenders in this sample suggests these characteristics could be useful in providing distinctions between one internet sex offender and another. The same holds true for the other behavioural characteristics that were reported on by the police.

The results showed a correlation between the three potential deviancy measures (sex and age of the children depicted, and severity of the image or video) suggesting that offenders who possessed the most deviant images or videos based on one of those measures also likely possessed the most deviant SEMIC on the other two measures as well. The results also showed a correlation between the size and deviancy of an offender's collection suggesting that as the size of an offender's collection of SEMIC got larger, the likelihood that he also possessed the most deviant images and videos (based on three deviancy measures) increased. This adds weight to the claim by Sullivan and Beech (2004) that internet sex offenders become desensitised to the material they are using and seek out more deviant content to obtain the same level of arousal as before, thereby escalating their offending behaviour.

6.1.2: Criminal justice social worker subset

The social enquiry reports (SERs) the criminal justice social workers submitted to the courts prior to sentencing provided a detailed assessment of each internet sex offender's risk to recidivate (utilizing the Risk Matrix 2000 and in the later cases, the Stable/Acute 2007) as well as the same three post release management restrictions: no access to the internet, no unsupervised access to children and no use of technology capable of taking photographs. These reports focused largely on the demographic characteristics that described each offender such as: the offender's age, marital/relationship status, family upbringing, educational history, employment history, socio-economic status, whether or not he had children or access to them, whether or not he had any substance abuse problems, or prior convictions. These reports also mentioned

whether or not the offender admitted guilt, expressed remorse or declared that he was sexually attracted to the children in the images and videos he possessed.

This sample of internet sex offenders had an older average age than contact offenders who target children, generally had a higher educational attainment and came from a more affluent social class. However, as a group they also seemed to generally be more remorseful, more likely to admit guilt and more likely to admit that they have a sexual interest in children than contact offenders who target children. These demographic characteristics for this sample of internet sex offenders however, were also similar to what has been found in other samples (Babchishin et al., 2014; Faust et al., 2014; Wolak & Finkelhor, 2013; Wolak et al., 2011). The variations in the distribution of the offenders based on these characteristics were useful in providing distinctions amongst this sample of internet sex offenders.

6.1.3: Post hoc analysis—complete sample

A post-hoc correlational analysis showed some significant relationships between some of the behavioural characteristics reported by the police and some of the demographic or attitude characteristics reported by the criminal justice social workers. The results also showed a correlation between the age of the offender and how deviant his collection of SEMIC was, suggesting that as the age of the offender increased, the likelihood that his collection of SEMIC would be on the more deviant end also increased. A correlation was also found between the relationship status of an offender and whether or not he was a producer suggesting that offenders who were in relationships were more likely to be producers of SEMIC than offenders who were single. The results also indicated that as the deviancy of an offender's collection of SEMIC increased so did the likelihood that he was not in a relationship.

6.2: Theoretical and practical implications

These results add significance to the importance of a main finding of this thesis, that criminal justice social workers in Scotland did not collect or utilize

detailed information relating to the offender's behaviour when assessing the offender's likelihood to recidivate and when making recommendations for management. Criminal justice social workers appeared to be working under the incorrect assumption that internet sex offenders are similar to contact offenders who target children and any distinctions made were purely on the basis of demographic characteristics (age of the offender, marital status) and loosely on any attitudes the offender held (expressed guilt or remorse). This was likely because the procedures they followed and the actuarial risk assessment tools they utilized categorized all internet sex offenders together as a single group. The actuarial risk assessment tool used, the Risk Matrix 2000, makes risk distinctions between offenders utilizing weighted behavioural characteristics related to an offender's sexual deviancy: having non-contact offences, stranger victims and male victims. These are criteria all internet sex offenders likely meet, this sample of offenders included. In contrast however, few contact offenders who target children meet all of those criteria. The recidivism risk rating assigned to this sample of internet sex offenders by the criminal justice social workers were skewed to the high risk side. This is likely a very high over estimation as internet sex offenders have been shown to be very low risk to reoffend (Seto et al., 2011). While actual recidivism rates for this sample were not measured, few offenders likely reoffended.

While it is not yet known which characteristics best predict recidivism or escalation for internet sex offenders, taking a more holistic approach incorporating information about the offender's demographics, offending behaviour and attitudes likely will provide the most comprehensive distinctions between offenders when assessing risk and making management recommendations.

6.3: Recommendations for criminal justice social workers

6.3.1: Risk assessment of internet sex offenders

1. **Cautiously use structured clinical judgement**

   Practitioners should cautiously use structured clinical judgement until either, the risk assessment tools created and validated for contact sex offenders (RM2000 & Stable/Acute 2007 for example) are validated for the use on internet sex offenders who have not committed contact offenses against children, or new risk assessment tools are created specifically for internet sex offenders. As discussed in the previous chapter, the weighted deviancy measures used in the current risk assessment tools to differentiate between offenders and suggest risk, do not adequately distinguish between internet sex offenders, likely resulting in an over estimation of recidivism risk. This thesis has identified several behavioural and demographic characteristics, as well as offender attitudes about the crime prior to sentencing, that might help to distinguish between different offenders that collect and share SEMIC. While it is not known how significant or what the weighting each of these characteristics should have in relation to his risk to reoffend, having information related to these characteristics should be useful for structured clinical judgement.

Seto (2013) points out that actuarial risk assessment tools are more accurate at predicting recidivism, as certain statistically derived risk factors could hold more weight and inexperienced practitioners might not be able to control for or properly calculate using structure clinical judgement. The lack of research or knowledge relating to which characteristics or factors should carry the most weight, nevertheless, supports the argument for the use of structured clinical judgement until more about this particular offender group is understood. An assessment inventory utilizing these characteristics, with the potential to distinguish between internet sex offenders who collect and/or share sexually explicit media involving children can be found in Appendix D. While untested, this assessment inventory should provide some structure for practitioners

when assessing internet sex offenders and what behavioural, demographic or attitude characteristics might be important when collecting information and coming to any conclusions.

2. **Try to gather as much information as possible about the offender's offending behaviour and specifically what he did in relation to the law and his offence.**

    This includes assessing the offender's collection of images and videos for deviant sexual interests, for example material containing young children, boys and images/video that depict penetrative sex, beastiality or sadomasochism. This thesis found that offenders who possessed SEMIC considered deviant in one of those categories also likely possessed SEMIC considered deviant in the others.

    This assessment should also focus on the number of images and videos an offender possessed both in relation to the deviancy of those images as well as in relation to the quantity of pornographic legal images/videos the offender possessed. This thesis has argued that the quantity of images and videos an offender possessed could be indicative of how sexually preoccupied the offender is, with offenders having very large collections being more sexually preoccupied than offenders with only a few images or videos. A relationship was also found within this sample of offenders suggesting that those offenders with the largest collections of SEMIC (those who were likely the most sexually preoccupied) also had the most deviant collections based on all three of the deviancy measures.

    Determining how the offender stored his collection of SEMIC could also be useful in making risk distinctions. This thesis has argued that offenders who systematically stored or wilfully attempted to hide or encrypt their collection of SEMIC likely did so intentionally. These calculated decisions likely make their deviant sexual interests more pronounced than offenders who erroneously stored any SEMIC they possessed.

3. **Try to gather as much information as possible about circumstances surrounding the offender's life**

    This includes assessing the stability of the offender's job and relationships. The results of this study as well as the empirical work of others do not suggest that single offenders are more likely to recidivate than offenders in relationships. Similarly, unemployed offenders are not necessarily at more of a risk to reoffend than employed offenders. However, offenders who use this deviant behaviour as a coping mechanism for their relationship or work problems might be a higher risk to reoffend if similar stressors occur later and are not addressed. Understanding the circumstances surrounding why an internet sex offender used SEMIC to begin with, likely will aid in preventing repeat behaviour.

4. **Be cautious when inferring significance to lack of guilt or remorse**

    The prevalence of these two attitudes within the SERs in this sample suggested the criminal justice social workers might have been relying on them a little too much when making risk judgements. Babchishin et al. (2014) has reported that internet sex offenders tend to be more remorseful and admit guilt more readily than contact offenders who target children. Babchishin et al. (2014) attributed those attitudes to preventing internet sex offenders from reoffending or committing contact offences. This could suggest that internet sex offenders who lack remorse or guilt are a higher risk to reoffend than internet sex offenders who are remorseful and admit guilt. Yet, more research is needed to determine if this is a significant factor.

6.3.2: Internet sex offender management

1. **Don't manage all internet sex offenders in the same way**

   Recent appeals court rulings have stipulated that liberty restrictions on internet sex offenders need to be justifiable, not overly broad, manageable and enforceable (Gillespie, 2011a). This means that not all sexual offence prevention orders (SOPOs) will be appropriate for every internet sex offender.

2. **Utilize behavioural characteristics when making recommendations**

   Understanding the behavioural characteristics about each internet sex offender can help to develop a management strategy unique to that offender. For example, offenders who have attempted to hide SEMIC by using encryption or who have stored images or videos on removable media (USB drives), could be ordered to never use encryption or own any removable media, thus mitigating the risk of undetected re-offence.

   Assessing the offender's collection of SEMIC could also be important when making a determination of whether or not the offender is likely to be a risk to any children he might have or have access to. If the images and videos the offender possesses do not seem to match the age and sex of his children, there is likely to be little risk.

   Not all internet sex offenders will have produced images or videos. Imposing a restriction preventing offenders who have a history of only collecting images from owning or using a device capable of taking photographs likely is overbroad. Nevertheless, restricting an offender who has a history of producing images or videos from freely using an image capture device might be more appropriate.

6.4: Recommendations for future research

This thesis has conceptualised and discussed the behavioural, demographic and attitude characteristics criminal justice social workers and the police in Scotland have collected about a sample of internet sex offenders. This

thesis has also postulated how these characteristics might aid in making distinctions related to the risk assessment and management of those offenders based on the limited empirical work on internet sex offenders as well as a more established research and knowledge base of contact sex offenders. However, due to the non-longitudinal design of this study and the small sample size, assessing actual recidivism rates was not possible. Future research might further these ideas by asking:

- Are internet sex offenders who possess more deviant SEMIC characterised by having images depicting very young children, boys or extreme sexual acts, including penetration and bestiality, more likely to recidivate than offenders who possessed less deviant SEMIC?
- Are internet sex offenders who possess large quantities of SEMIC more likely to recidivate than offenders who possess smaller quantities of SEMIC?
- Are younger internet sex offenders more likely to recidivate than older internet sex offenders?
- Are sex offenders who have been collecting for a longer period of time more likely to recidivate than offenders who have been collecting for a shorter period of time?
- Is having a large collection of SEMIC indicative of being sexually preoccupied or is viewing time a better measure?
- Does the average age and sex of the children depicted in a dual offender's collection match the age and sex of the children he committed contact offences against?

6.5: Conclusions

This study was an exploratory analysis of the information on internet sex offenders routinely collected by criminal justice social workers and the police in Scotland. It contributes to the limited body of knowledge on this offender group by showing that a sample of internet sex offenders in Scotland are similar to

other samples in different countries in relation to their behaviour, the demographics that describe them and in limited respects their attitudes. This thesis also showed that those same characteristics not only differentiate them from contact offenders who target children, but also from one another. One of the main findings of this study was that criminal justice social workers did not collect or utilize detailed information relating to the offender's behaviour when assessing the offender's likelihood to recidivate and when making recommendations for management. Given the potential importance of this information for both risk assessment and management, this is an important finding.

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Glossary of key terms

Contact sex offender who targets children: a contact sexual offender whose victims include children…also know as a child molester

COPINE: Combating Paedophile Information Networks in Europe

COPINE scale: 10 level rating system used to categorise SEMIC

Internet sex offender: an offender convicted for being in possession, distributing and/or producing SEMIC (child pornography)

Modified COPINE scale: condensed 5 level version of the original 10 level scale

MAPPA: Multi-Agency Public Protection Arrangement

P2P: Peer to peer networking – a communication (internet) based distribution system where two users can exchange files with or without a centralised server

RM2000: Risk Matrix 2000 – risk assessment tool for contact sexual offenders

SEMIC: Sexually Explicit Media Involving Children (child pornography)

SER: Social Enquiry Report (now called presentencing report) – a report drafted by criminal justice social workers for the courts detailing the crime, the offender, his history, reasons for the crime, risk assessment and recommendations for sentencing and management

Stable/Acute 2007: risk assessment tool for contact sexual offenders

Appendix A: Tanner Scales

(Marshall & Tanner, 1969, 1970)

Pubic Hair (both boys and girls)

Stage 1. Prepubetal. The velus over the pubes is no further developed than that over the abdominal wall…no pubic hair at all (typically age 10 and younger)

Stage 2. Sparse growth of long, slightly pigmented downy hair, straight or only slightly curled, appearing chiefly at the base of the penis and scrotum (males) and on the labia majora (females) (typically age 10-11.5)

Stage 3. Considerably darker, coarser, and more curled. The hair spreads laterally over the pubis. (typically 11.5-13)

Stage 4. Hair is adult like quality, but the area covered by it is less than in most adults. It spares the medial thighs. (typically 13-15)

Stage 5. Adult in quantity and type and extends to the medial surface of the thighs. (typically 15+)

Genitals (Male)

Stage 1. Prepubetal. The scrotum, testes and penis are of about the same size and proportion as in early childhood. (typically age 9 and younger)

Stage 2. Testes and scrotum have enlarged to volume between 1.6 and 6 ml. The scrotum skin is thinner, redder and larger. However, the penis length is unchanged. (typically 9-11).

Stage 3. Penis is larger in length, testes and scrotum continue to grown to a volume of about 6-12 ml. (Typically 11-12.5)

Stage 4. Penis enlarges to 10 cm in length and the widens as well. The testes and scrotum enlarge to a volume between 12 and 20 ml and the scrotum darkens further in pigment. (Typically 12.5-14)

Stage 5. Genitalia adult in size and shape. The testicular volume is greater than 20 ml and the penis is larger then 15 cm in length. (Typically 14+)

Breasts (Female)

Stage 1. Prepubescent. There is no glandular tissue and the areola follows the skin contours of the chest. (Typically age 10 and younger)

Stage 2. The breast bud forms with a small area of surrounding glandular tissue. The areola also starts to widen. (Typically 10-11.5)

Stage 3. The breast starts to become more elevated and extends beyond the area of the areola, which also widens but remains in contour with the rest of the surrounding breast. (Typically 11.5- 13)

Stage 4. There is increased breast size and elevation; The areola and the papilla form a secondary mound which project from the contour of the surrounding breast. (Typically 13-15)

Stage 5. The breasts reach full adult size. The areola returns to the contour of the surrounding central breast with a protruding central papilla. (15+)

Appendix B: Risk Matrix 2000 Scoring Guide

(Thornton, 2007)

20. RISK MATRIX 2000 SCORING FORM

Offender Identification Information	Scorer Identification Information
Family Name	Family Name
Forenames	Forenames
Date of Birth	Date RM2000 Completed
Identification Number	

RM2000/S Scale – Risk for Sexual Recidivism

Step One: Scoring Risk Factors

Circle the number of points that apply for each risk factor

Age	18-24 = 2 points; 25-34 = 1 point; Older = 0 points
Sexual Appearances	1 = 0 points; 2 = 1 point; 3,4 = 2 points; 5+ = 3 points
Criminal Appearances	4 or less = 0 points; 5 or more = 1 point

Step One: Categorization

Circle the total number of points from the previous table, and the corresponding Category and Label.

Points	Category	Label
0	I	Low
1-2	II	Medium
3-4	III	High
5-6	IV	Very High

Step Two: Aggravating Factors

Circle the number of points that apply for each aggravating factor.

Male Victim of Sex Offense	No = 0 points; Yes = 1 point
Stranger Victim of Sex Offense	No = 0 points; Yes = 1 point
Single (Never in Marital Type Relationship)	No = 0 points; Yes = 1 point
Non- Contact Sex Offence	No = 0 points; Yes = 1 point

Step Two: Revised Risk Category

Put the risk category up one (e.g. from I to II or from II to III, or from III to IV) if two or three aggravating factors apply, and up two categories (e.g. from I to III, or from II to IV) if four aggravating factors apply. Circle the Revised Risk Category and Label.

Revised Risk Category	I	II	III	IV
Label	Low	Medium	High	Very High

Appendix C: Social Enquiry Report Template

BASIS OF REPORT

This Report is based on the following:

OUTSTANDING MATTERS

ANALYSIS OF CURRENT OFFENCE (S) AND OFFENDING BEHAVIOUR

Offender version of events:

PERSONAL CIRCUMSTANCES

Education/Employment

Health and Addictions:

Substance Misuse:

ASSESSMENT OF RISK OF RE-OFFENDING AND RISK OF SERIOUS HARM

RELEVANT DISPOSALS

Deferred Sentence:

Probation:

Community Service:

Custody:

SUMMARY AND CONCLUSION

Appendix D: Internet Sex Offender Assessment Inventory

Offense related questions

1. How many total sexually explicit images and videos involving children was the offender in possession of?
2. How did that overall distribution relate to other pornography (legal or not) that the offender was in possession of? How many other pornographic images and videos did the offender have?
3. What was the break up of child sex abuse images and videos based on the following criteria:
   a. Sex of the child victims
   b. Stage of development of the child victims (age if know as fact)
   c. Rating level based on modified COPINE scale
4. Was there a particular image or video that the offender watched or viewed significantly more than others?
   a. If so, how did it fit with the criteria listed above?
5. Were there images or videos that the offender was in possession of, but didn't view?
   a. If so, how did it fit with the criteria listed above as well as the offender's overall collection?
6. Did the offender have a preferred type of image or video?
   a. If so, what were the characteristics that described it?
      i. How did that relate with the offender's overall collection of images and videos?
7. How much time did the offender spend "collecting" SEMIC (hours per day & hours per week)?
   a. Did this negatively affect his life?
      i. If so, how?
8. Where did the offender source the SEMIC from?
9. Did the offender pay for any SEMIC?
   a. If so, for all of it, or for which parts of his collection specifically?
   b. How did he pay for it?
10. Was the offender masturbating to the images or videos?
   a. If so, how often (hours per day & hours per week)?
      i. how did that relate with how often he was searching for images and videos?
   b. If so, were there specific images and videos that the offender was using?
      i. how did those images or videos relate to the offender's preference if he had one (as above)?
11. Was any type of encryption used or did the offender try to hide any images or videos?
   a. If so, was it the whole collection?
      i. If not, what was different about the images or videos that the offender chose to hide versus the ones that he didn't?
   b. What reasons did the offender give for the use of encryption or his hiding behaviour?

12. Was the offender sharing or distributing any images or videos?
    a. If so, how specifically?
        i. Was he using P2P or another sharing platform?
        ii. Was he making money?
    b. Was he sharing everything he was collecting?
        i. If not, how did what he shared compare with what he didn't share based on the criteria listed above?
13. Was the offender producing real images or videos (pseudo images or videos don't count) (don't include sexting or self produced self subjects)?
    a. If so, how would those images or videos be described based on the criteria listed above?
    b. Did the offender know the child victims?
        i. If so, was the victim aware of the image or video being made?
    c. How does the images or videos that were created compare with the images and videos in his collection based on the criteria above?
    d. Was he sharing or distributing the images or videos that he produced?
        i. If not, why?
        ii. If only some, how did those compare with the ones he wasn't sharing based on the criteria listed above?
    e. Was he gaining financially from the production of child sex abuse images or videos?

Offending History

1. Has the offender been charged or convicted for a previous internet based sex crime or a previous crime related to SEMIC?
    a. If so, when and which crimes?
2. Has the offender been charged or convicted for any previous sex crimes against adults?
    a. If so, when and which crimes?
3. Has the offender been charged or convicted for any previous sex crimes against children?
    a. If so, when and which crimes?

Offender Demographics

1. Age of offender?
2. Is the offender employed?
    a. If so, what type of job?
3. How educated is the offender?
4. Does the offender have a high disposable income?
5. Is the offender married?
6. Is the offender in a committed relationship?
7. Has the offender ever cheated on his partner?
    a. Does that happen frequently?

Offender's childhood

1. Was the offender abused as a child?
    a. If so, by whom?
    b. How old was he?

c. What specifically happened?
d. Does he think that had a bearing on his current sexual offending?

Sexual History

1. When was the last time the offender had sex?
    a. Is the offender happy with that?
2. How frequently does the offender have sex?
    a. Is the offender happy with that?
3. When the offender has sex, what happens?
    a. Does he have any other paraphilias?
    b. How long does it last?
    c. Is he satisfied or does he want more?
4. What was the longest relationship the offender has ever been in?
5. How old was he for his first relationship?
6. How old was he when he first had sex?
7. How old was he when he first masturbated?
8. How old was he when he had his first sexual experience?
9. What is his sexual orientation?

Substance Abuse Problems

1. Does the offender drink alcohol?
    a. If so, how much (units per week)?
    b. If so and a lot, has he ever received treatment for his addiction?
        i. If not, why not?
2. Does the offender use any controlled substances or other drugs?
    a. If so, how many times per week?
    b. If so, does this have a negative impact on his life? How?
    c. If so and its a problem, has he ever received any treatment?